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Air France's problems
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FINANCIAL TIMES

Europe's Business Newspaper

TUESDAY OCTOBER 26 1993

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Boeing earnings down 45% as recession bites

Boeing, the world's leading commercial aircraft manufacturer, reported a 45 per cent drop in third-quarter net earnings as it continued to be hit by recession in the world's civil aviation industry. The earnings of \$188m, or 58 cents a share, on sales of \$5.153bn, were within the range of analysts' expectations but the shares dipped 9% to \$37 1/2 in morning trading on the New York Stock Exchange. Page 17

Russian property decree expected: Russian president Boris Yeltsin was expected last night to sign a decree allowing for the sale and purchase of land, seven decades after the Bolsheviks abolished private property. Page 16

Warning on Spanish rates: Spain's economy and finance minister, Pedro Solbes, has warned that benchmark interest rates in Spain, now at a historic low of 2.25 per cent following cuts last week, are unlikely to fall further in the immediate future. Page 3

Evidence swap in VW probe: The way has been cleared for US and German criminal authorities to exchange evidence gathered in their parallel investigations of alleged theft and industrial espionage by Volkswagen executives. Page 16

UN discusses new Yugoslav talks: The United Nations is considering whether to convene a new round of peace talks in London to end the civil war in former Yugoslavia, UN secretary-general Boutros Boutros Ghali said. Page 2

Dinkins considers offer for betting shops: Ladbroke Group, UK leisure company, has approached New York mayor David Dinkins (left) with an offer to buy or run the city's 93 off-track betting shops. John Long, president and chief operating officer of Ladbroke Racing Inc in the US, has written to Mr Dinkins suggesting a meeting to discuss "several levels of involvement" by the UK company. Page 17

Power sell-off looms: The Swedish Government is reportedly considering a partial privatisation of Vattenfall, Europe's sixth largest electricity producer, to enable the company to raise \$2.4bn (\$397m) in new capital. Page 17; Asset disposal helps boost Norsk Hydro. Page 18

Palestinians freed: Israel freed hundreds of Palestinian prisoners at the beginning of a mass release aimed at bolstering the Israeli-Palestinian peace process. Page 4; Inside the prisons of the intifada. Page 4

Singapore Airlines: consistently one of the world's most profitable carriers, blamed recession in many markets, intense competition and the strength of the Singapore dollar for a 15 per cent drop in pre-tax profits to \$242.5m (\$382.9m) for the six months ending September 30. Page 21

Gatt fears ease: Significant new offers to open up national procurement markets were put forward in Geneva, reducing concerns that disputes over the issue will jeopardise progress towards successful completion of the Uruguay Round of world trade liberalisation talks. Page 5; French managers back Gatt peace. Page 5

France wants nuclear co-operation: France said it would not let disappointment at the UK government's decision to cancel an air-launched missile project affect its desire for closer Anglo-French nuclear co-operation. Page 3

Exxon, US energy group: comfortably exceeded market expectations with a 19 per cent rise in third-quarter net income on the back of recent cost-cutting and asset disposals. Page 20

Optimism on vehicle sales: UK van and truck makers believe the most severe recession in the commercial vehicle market since the second world war may be over, as registrations rose by 14.94 per cent in September. Page 8

Energy aid to be considered: The US Energy Department is to study whether the smaller independent companies in the American oil and gas industry should receive greater government support. Page 6

Have one: Over a million young people a week in the UK are now going to "rave" parties and spending up to a "staggering" £25a (£2.9bn) a year on the activity, according to a research and forecasting organisation. Page 16

STOCK MARKET INDICES

FT-SE 100	3184.8	(-14.2)	New York Composite	1481.5
Yield	3.88			
FT-SE Euroshare 100	1378.89	(-7.47)	London	1406
FT-SE All-Share	1972.00	(-0.35)	DM	2.4075
1884st	20,393.53	(+44.59)	FFr	0.8825
New York Composite	1481.5		Sfr	2.19
Dow Jones Ind Ave	3049.02	(-0.28)	Y	161.25
S&P Composite	482.22	(-1.05)	£ Index	90.5

US LUNCHTIME RATES

Federal Funds	3 1/4%
3-mo Treas Bill: Yld	3.089%
Long Bond	10.23
Yield	10.02%

LONDON MONEY

3-mo interbank	5 1/2
Life long gilt future: Dec 11/93	115.13
100/100	
Short 15-day (Dec)	116.44
Gold	
New York Comex (Dec)	370.5
London	371.75

NORTH SEA OIL (pence)

Dec 11/93	115.13
100/100	
Short 15-day (Dec)	116.44
Gold	
New York Comex (Dec)	370.5
London	371.75

STERLING

New York Composite	1481.5
London	1406
DM	2.4075
FFr	0.8825
Sfr	2.19
Y	161.25
£ Index	90.5

DOLLAR

New York Composite	1481.5
London	1406
DM	2.4075
FFr	0.8825
Sfr	2.19
Y	161.25
£ Index	90.5

Other

US\$100	108.40
US\$100	108.40
US\$100	108.40
US\$100	108.40
US\$100	108.40

Other

US\$100	108.40
US\$100	108.40
US\$100	108.40
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US plans drive to open up overseas financial markets

By George Graham in Washington

THE US Treasury plans a drive next month to try to open up financial services markets in key Asian and Latin American countries.

Mr Lloyd Bentsen, the US Treasury secretary, said the Clinton administration would work to level the playing field for US banks and financial service companies.

"Too often the playing field looks like the Rockies. Barriers - both formal and informal - prevent US firms from entering markets on an equal footing with their competitors," Mr Bentsen said in a speech yesterday to the Center for National Policy, a Washington think-tank.

Mr Bentsen said the US's highest priority was a multilateral agreement in the Uruguay Round of trade talks that would open financial markets on a non-discriminatory basis.

"But we have made it clear that we will not agree to lock our markets open on a Most Favoured Nation basis, unless or until other countries commit to open their markets to US financial institutions," Mr Bentsen said.

"We are prepared to guarantee national treatment and full access to countries that commit to open their markets. And, we are prepared to guarantee their existing operations in our mar-

Bentsen supports legislation to free up domestic banking

ket. But we will not assure countries that keep their markets closed the right to expand operations here, or to take advantage of new powers or benefit from future reforms," he added.

Mr Jeffrey Shafer, the assistant Treasury secretary for international affairs, is to travel to a number of countries to warn them they must do more to unlock existing barriers to US financial institutions.

To lend force to Mr Bentsen's speech, the administration yesterday threw its weight behind the fair trade in financial services bill being sponsored in Congress by Senator Donald Riegle.

The legislation would empower - but not compel - the US government to deny the right of further expansion to banks and financial institutions from countries which did not offer equal access to US institutions, within the constraints of the Uruguay Round.

Senator Riegle hopes to pass a bill before Congress goes into recess at the end of the month. In the House of Representatives, however, aides warn that the measure is unlikely to pass before next year.

Such a measure has been passed before by both chambers,

but ran aground on procedural difficulties. It parallels retaliatory mechanisms contained in the European Community's second banking directive, and is not expected to cause difficulty to banks from European countries.

Mr Bentsen said the US was focusing on access to Japan for pension fund management and corporate underwriting.

The Treasury secretary also called for legislation to allow US banks to open branches outside their home states.

"The basic approach would be to let banking organisations convert existing multi-bank, multi-state operations into a single bank, multi-branch operation," he said.

Richard Waters adds from New York: US banks gave only a subdued welcome to this initiative. Few restrictions remain on their ability to operate across the US through separate subsidiaries, although the ability to branch across state lines would reduce the cost and complexity of nationwide banking.

On the other hand, the banks fear that a debate over branching would open up a new opportunity for insurance agents to lobby against bank involvement in selling insurance products.

Former transport head chosen to succeed Attali

Air France strike to continue despite setback

By John Ridding in Paris



Air France strikers demonstrating on a road near Orly airport yesterday. Today's protests may represent the peak of the dispute.

AIR FRANCE ground staff yesterday voted to continue striking at least until tonight, in spite of the French government's decision to withdraw a controversial cost-cutting plan which has triggered a crippling strike at the airline.

The vote in favour of continued action means that a broader protest planned for today, dubbed "Black Tuesday" by the French press, is expected to go ahead. Ground staff are due to be joined in a 24-hour strike by Air France pilots and cabin crew as well as many union members at Air Inter, the national carrier's domestic airline subsidiary, and Aéroports de Paris, the airports operator.

Today's protest may, however, represent the peak of the dispute. Forces Ouvrières, one of the union groups which has spearheaded the protest, said its members could return to work tomorrow.

The task of resolving the dispute and negotiating a new recovery plan for the loss-making airline will fall to Mr Christian Blanc, chosen by the French government last night to succeed Mr Bernard Attali. Mr Attali resigned on Sunday when the government scrapped his proposed austerity measures, which included 4,000 job cuts by the end of next year and cuts in overtime pay and bonuses.

Mr Blanc, the former head of RATP, the urban transport operator which runs the metro and bus system in Paris, is expected to be confirmed officially in his new post on Wednesday. Ironically, he resigned from RATP last winter following after a strike in which he failed to secure government support.

The news of Mr Blanc's appointment coincided with the resignation of Mr Jean-Cyril Spinnato, chairman of Air Inter, yesterday. It is the dispute's second

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Retreat worries Italy, Page 2
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EC economy may grow by 2% in 1994

By Andrew Hill in Luxembourg

THE European Community has passed the low point of the recession, the EC's economic affairs commissioner said yesterday.

Mr Henning Christophersen said that if forecasts of German recovery next year proved accurate, the EC economy would grow faster than the Commission had forecast.

"We have seen the bottom and we are on the way up," he told journalists at a meeting of

finance ministers in Luxembourg.

His comments provided an upbeat start to a busy week for the Community, ending on Friday with a summit of EC leaders in Brussels.

But ministers agreed they should maintain efforts to promote growth and employment. According to EC forecasts, even if the German economy lives up to economists' expectations next year, the EC economy will not expand enough to put very many

of the Community's 18m jobless people back to work.

Mr Piero Barucci, Italian Treasury minister, said nothing had altered gloomy employment prospects for Europe.

A report from Germany's six leading economic institutes published yesterday says the German economy should grow 1.5 per cent next year. This year it is expected to shrink 1.5 per cent.

Mr Christophersen said the commission was "encouraged" by the forecasts. Brussels has

predicted that the EC economy will grow by 1.25 per cent this year, and by between 1 and 1.5 per cent in 1994. But Mr Christophersen said that if German forecasts were accurate, the EC economy could grow by as much as 2 per cent next year, signalling the beginning of the end of recession.

Ministers yesterday discussed increasing the number of infrastructure projects eligible for funds from an Ecu8bn (\$9.38bn) temporary lending facility from

the European Investment Bank. So far only Ecu3bn of loans have been granted.

Mr Kenneth Clarke, UK chancellor of the exchequer, stressed yesterday that governments should be careful to restrict their intervention to areas where they could be effective, such as limiting inflation and budget deficits.

Mr Gert Haller, state secretary at the German ministry of finance, also said Europe's

Continued on Page 16

Major rejects Sinn Fein's proposal for IRA ceasefire

By Philip Stephens in London

THE British government angrily rejected yesterday a proposal from Mr Gerry Adams, leader of Sinn Fein, for a conditional ceasefire by the IRA.

It accused Mr Adams of "sickening hypocrisy" and set an unconditional and permanent end to violence as a precondition for the IRA and its supporters to be brought into any negotiations on the future of Ulster.

As the weekend massacre of Protestant civilians in Belfast's Shankill Road was followed by a bomb attack on a mainland railway line, Mr John Major, the UK prime minister, came close to dismissing the initiative drawn up by Mr Adams by Mr John Hume, leader of the nationalist Social Democratic and Labour Party.

But the government was careful not to extend its denunciation of Mr Hume's role in preparing the proposals.

Mr Adams suggested a positive response from the London government to the Hume-Adams proposals could bring an IRA ceasefire. But at the Commonwealth summit in Cyprus, Mr Major retorted: "I am not going to do deals with people who plant bombs and kill innocent people."

That view was reinforced in the House of Commons by Sir Patrick Mayhew, the Northern

Ireland Secretary, as the latest IRA attacks brought universal condemnation from government and opposition MPs.

In a sombre denunciation of the Belfast bombing which killed nine Protestant civilians as well as one of the terrorists - Sir Patrick said: "Next to the sickening quality of what was done to people in the Shankill on Saturday."

Belfast remembrance service picture.....Page 8
New blow for Ulster's Image-makers.....Page 8
Joe Rogaly: No need to talk to the IRA.....Page 14

day has been the sickening quality of the hypocrisy of Mr Adams. The condition for dialogue with Sinn Fein and the IRA was an end to violence "without condition and forever".

The Northern Ireland secretary, however, did not criticise Mr Hume's contacts with Mr Adams. Instead he "saluted" him for his courage in seeking a settlement. This reinforced the view at Westminster that the government is anxious not to denounce the SDLP leader from its own attempts to negotiate with Dublin a new framework for a political settlement in the province.

Senior ministers said they saw

no real prospect of the Hume-Adams proposals leading to a lasting settlement, but could not afford to reject them out of hand before they had been formally presented by Dublin.

Mr Hume said the British government could not afford to reject a set of proposals which had as their objective a "lasting peace and total cessation of violence". But Mr Major underlined the gulf between the two sides by accusing Mr Adams of blackmail: "If Mr Adams can end the violence then he should end the violence now without preconditions, without any delay... and without any proposals which sound to me tantamount to blackmail."

Sir Patrick's statement, which won the broad approval of the opposition Labour and Liberal Democrat parties, came after another rise in Belfast's sectarian death toll when a Catholic taxi driver died of gunshot wounds inflicted at the weekend by loyalist terrorists.

The IRA also brought chaos to the rail network in southern England after detonating a bomb on the main line from London to the west of England. Two bombs were placed in Reading, one exploded, but the other was defused. Police said that the second blast had been calculated to kill workers from the emergency services responding to a coded warning of the first bomb.

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سكاي نيوز

NEWS: EUROPE

EC's limit on duty-free gifts doubled

By Andrew Hill in Luxembourg

EUROPEAN Community finance ministers yesterday doubled the value of duty-free gifts which travellers within the Community will be able to bring home from the beginning of next year.

The ministers agreed to increase the outdated Ecu45 (285) limit on duty-free purchases of watches, camera equipment and other gifts, to Ecu90. They also increased the tax-free allowances for gifts bought outside the Community from Ecu45 to Ecu175.

Yesterday's deal leaves the allowances for duty-free wine, spirits and tobacco unchanged, but it will provide a consolation for EC duty-free shops as they wind up their EC activities.

Duty-free shopping on journeys within the Community will end on June 30, 1995. The European Commission had resisted prolonging duty-free sales within the EC, because it believed limits would be difficult to enforce once internal controls on goods were abolished on January 1, 1993.

However, ministers agreed last year that duty-free shops could police the system themselves until its abolition in 1993.

German objections to an increase in duty-free limits were overcome yesterday, after ministers agreed that Germany could enforce lower travellers' allowances at borders with Poland and the Czech Republic to avoid fraud.

Ministers also discussed ways of harmonising tax on investments and savings across the Community, although such a system is some way off. In 1993, the Commission proposed harmonising such taxes at 15 per cent to end the flight of private savings to EC countries with low or non-existent taxes.

Mr Philippe Maystadt, Belgium's finance minister, who chaired the meeting, said an existing working group would now examine how to build a system which could include countries where tax is withheld at source, and countries which oblige banks to declare interest earned on savings.

Mr Durao Barroso earlier expressed his opposition to immediate changes in the EC's administrative structures in an article published on Monday in the Lisbon newspaper Publico.

Some member states, including Britain, want changes in the way the EC functions before it welcomes in Finland, Norway, Austria and Sweden. Britain has argued that the rotation of the presidency of the EC should be changed to ensure that the troika of present, previous and succeeding presidents should not be dominated by a series of small countries or by countries from the same geographical area.

The Portuguese foreign minister, Mr Jose Manuel Durao Barroso, said after talks with his Spanish counterpart, Mr Javier Solana: "The Community can't function in the same way with 16 as it did with 12. But we don't think this is a convenient time for great institutional changes," he said. Mr Solana said he agreed.

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'Social dumping' fears over Emu

THE European Community's move to economic and monetary union threatens to enshrine social inequalities between one country and another, according to a draft European Commission policy paper on social policy, Reuter reports from Brussels.

"It would be foolish to deny that Emu would be a serious challenge to social policy matters," says the green paper, drawn up by social affairs commissioner, Mr Padraig Flynn.

"The Community should pay the greatest attention to any possible negative social effects of the integration process, in particular the risk of dumping."

The threat of adverse effects underlined the need to counter a spread of "social dumping", whereby companies relocate to countries where social costs are cheaper, by harmonising social legislation in step with convergence of government monetary policies under Emu.

"We are worried... We do believe that if we do want to avoid dumping we need EC social legislation," an official for the European Trade Union Confederation said. He said "social dumping" had taken place and could spread under Emu.

However, the European employers' group, Unice, said complete harmonisation of social systems is not a necessary condition for progress towards the objectives of the Maastricht treaty.

Brussels drops cement case

The European Commission has terminated proceedings against the British Cement Association and three of its member companies in connection with allegations that they infringed EC competition laws at national level, writes Andrew Baxter.

The Commission had begun proceedings in 1991 against the association and Blue Circle, Castle Cement and the Rugby Group. Allegations centred around a "common price and marketing agreement" which had been terminated in 1987.

Mr Hurd said the other mediator, Lord Owen, who is the representative of the European Community, approved of the idea of a new London conference and would discuss it with EC foreign ministers when they meet in Luxembourg today.

"There's no good calling a conference tomorrow with no guarantee it is to succeed. So it needs careful preparation and that's what its receiving," Hurd said.

In fighting in Bosnia yesterday a Danish lorry driver was killed and nine other UN workers wounded when their relief convoy was caught in crossfire between Croats and Muslims in central Bosnia.

In Sarajevo, up to 12 people were injured in an attack on a market amid an upsurge in shelling by Serb forces on Mount Zec, north-west of the capital, Bosnian radio said.

The Bosnian president, Mr Alija Izetbegovic, yesterday named his foreign minister, Mr Haris Silajdzic, to the vacant post of prime minister and also included him in the republic's collective presidency.

His appointment may reflect intensified efforts to reach a settlement with Serb adversaries as Mr Silajdzic, a Moslem, is the key figure for bilateral negotiations with the Bosnian Serbs. He was singled out at the weekend by Mr Momcilo Krajisnik, a Bosnian Serb leader, for "having turned around and understood reality".

Meanwhile, relief operations of the UN High Commissioner for Refugees suffered a severe setback when two convoys, escorted by British armoured vehicles, were hit by machine-gun and mortar fire as they crossed a frontline south of Novi Travnik.

Another Danish driver was wounded and eight Dutch soldiers accompanying the military supply convoy were hurt.

Mr Nicholas Morris, a UN spokesman, said in Zagreb, the Croatian capital: "Such an attack is totally unacceptable... everyone knows that this is a vital road for the survival of all communities in central Bosnia."

Air France retreat worries Italy

By Robert Graham in Rome

The French government's climbdown over cost-cutting measures at Air France, the national carrier, has been viewed with concern in Italy where the government is planning similar cuts in loss-making, state-owned industries.

The government is committed to a broad programme of privatisation and restructuring, and this autumn faces labour unrest over jobs threatened in the chemicals, defence and steel sectors as well as public transport.

The position of Air France management has particular relevance for Alitalia. The loss-making airline has seen its plans for an early return to profit undermined by the recession and

posted a half-year loss of L216bn (290m). Last week plans were leaked of a restructuring scheme that involved the loss of more than 1,000 jobs among ground staff in plus a renegotiation of pay claims already agreed for 1994 for the flight personnel. Alitalia presently employs 21,000 people. Pilots risk losing their bonuses while cabin crew could have their pay frozen.

These moves are expected to be strongly resisted by Alitalia staff. The latter claim that only since 1990 have their pay levels been brought up to the norms of other European carriers such as Air France.

However, a strike planned for today by the air transport sector protesting against proposed cuts in Alitalia and its

subsidiary, Ati, was called off yesterday. This was after assurances were received from IRI, the state holding company that controls Alitalia, that a meeting would be held on November 5 to hear the union point of view.

The protests over threatened job cuts across state-run industry have taken the form of factory occupations and the blocking of roads and railways. Over the weekend police removed by force a group of unemployed protesters who had occupied Naples cathedral. A four-hour general strike is due on Thursday to protest against the failure of the 1994 budget to provide sufficient funds to combat unemployment.

Unlike his French counterpart, Mr Carlo Azeglio Ciampi, the prime minister, is not an elected politician and heads a government with a limited mandate that is largely composed of technocrats. Mr Ciampi's room for political manoeuvre in dealing with labour unrest is strictly circumscribed, while the need to curb public spending has reduced the scope for financial palliatives.

Trades union representatives said yesterday they were firmly against any form of violent protest but could not always control grassroots frustration over rising unemployment.

Last month, the union leadership was considerably embarrassed by the violent take-over by workers at a petrochemical plant at Crotona in southern Italy.

London may host new Yugoslav talks

By Laura Silber in Belgrade and agencies

THE United Nations is considering whether to convene a new round of peace talks in London to end the civil war in former Yugoslavia, the UN secretary general, Mr Boutros Boutros Ghali, said yesterday.

Mr Boutros Ghali said after talks in London with the British foreign secretary, Mr Douglas Hurd, that the conference would need careful preparation as well as the approval of all the warring parties in ex-Yugoslavia and the participants of last year's talks in London.

"We are still preparing the idea. We believe that this idea may help us to find a solution," Mr Boutros Ghali said. He said he held exploratory talks on Monday with the Norwegian mediator, Mr Thorvald Stoltenberg, who is the UN envoy in the Yugoslavia peace talks, and would meet him again today.

Mr Hurd said the other mediator, Lord Owen, who is the representative of the European Community, approved of the idea of a new London conference and would discuss it with EC foreign ministers when they meet in Luxembourg today.

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Mr Nicholas Morris, a UN spokesman, said in Zagreb, the Croatian capital: "Such an attack is totally unacceptable... everyone knows that this is a vital road for the survival of all communities in central Bosnia."

THE FUTURE OF PRIVATIZATION in EUROPE

Edouard Balladur
Prime Minister of France

will head a distinguished group of speakers, including:

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Minister of the Economy, France.

Anthony Carlisle
Chief Executive, Dewar Rogerson Limited, London.

Thomas J. Casey
Partner, Stadden, Arps, Slate, Meagher & Flom, Washington, DC.

Wim Dik
Chairman of the Board of Management and CEO, Royal PTT Nederland NV, The Hague.

Vladimir Dlouhy
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Director of Government & Industry Affairs, British Airways plc, London.

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Abel Matutes
Commissioner for Transport & Energy Policy, European Commission.

The Rt Hon Francis Maude
Head of Global Privatization, Morgan Stanley International, and former Financial Secretary to the Treasury, UK.

Edgar McCarthy
Director of Sales & Marketing, PowerGen plc.

Alessandro Ovi
Director of International Relations, IRI, Rome.

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Antoine Schwartz
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Stefan Szymanski
Professor, London Business School.

Daniel K. Tarullo
Assistant Secretary of State for Economic & Business Affairs, USA.

Robert M. Worchester
Chairman, Market & Opinion Research International Ltd (MORI), London.

Salvatore Zecchini
Assistant Secretary-General, OECD, Paris.

TRANSLATION

English/French/English simultaneous translation will be available throughout the conference.

CONFERENCE LOCATION

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THE SPONSORS



Herald Tribune.

Weekend FT PINK SNOW

On Saturday November 13, the Financial Times will publish the 1993/94 edition of PINK SNOW, an indispensable guide to the world's best ski resorts.

Last year's PINK SNOW did a brilliant job of bringing more than 2,000 resorts and helped compile an exclusive FT Top 10 list of ski resorts and travel companies. This year, in addition to the questionnaire, we are seeking information about you, the reader.

Each questionnaire received will be entered into a prize draw with a helicopter skiing weekend courtesy of Powder Hunter ski company. The first prize draw will be held during the weekend of 13-14 November. All prizes will be awarded by 14 November.

The winner's decision is final. Please note that you must be a resident of the UK, Ireland, France, Germany, Italy, Spain, Austria, Switzerland, Norway, Sweden, Finland, Denmark, Netherlands, Belgium, Luxembourg, Portugal, Greece, Cyprus, Malta, Ireland, and the Channel Islands to be eligible to win.

The closing date for entries is Sunday October 31, 1993. The winners' names will be published in PINK SNOW on Saturday November 13, 1993.

In addition, we would be interested to hear of your own personal skiing experiences. What do you most like? Or dislike? About what? Tell us. Write more than 500 words by Sunday October 31. The best replies may be featured in a PINK SNOW article.

1. How would you rate your skiing ability?
Beginner Intermediate Expert

2. How many skiing holidays have you had in the last five years (count a holiday as four or more nights away from home)?
1-2 3-5 6-10 More than 10

3. How many short skiing breaks have you had in the last 12 months (count a short break as up to three nights away from home)?
1-2 3-5 6-10 More than 10

4. In which countries have you skied during the last five years?
Switzerland Austria France Italy Canada Andorra Germany Scotland US Spain Other (write in)

5. To which resorts have you skied during the last five years? (please write in)
(i) (ii) (iii) (iv) (v) (vi)

6. (a) With which tour operators, if any, have you booked a packaged skiing holiday during the last five years?
(b) Please rate them for efficiency of service A-D where A = excellent and D = poor
(i) (ii) (iii) (iv) (v) (vi)

7. Which resorts had the greatest variety of ski runs?
(i) (ii) (iii) (iv)

8. Which is your favourite resort among those you have visited?
(i) (ii) (iii) (iv)

9. How often do you read (a) the Mon-Fri FT? (b) the Sat FT?
(a) (b)

10. Finally some details about yourself
Male Female
Under 25 25-34 35-44 45 or over
Working full-time Working part-time Studying Retired Unemployed

Mr/Mrs/Ms Forename Surname
Street and number
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Country
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Dissent at the heart of German forecasting

Quentin Peel on how one of the six economic research institutes differs on analysis and policy implications of continued stagnation

FOR THE first time in more than six years Germany's independent economic research institutes yesterday had to agree to disagree in their economic forecasts.

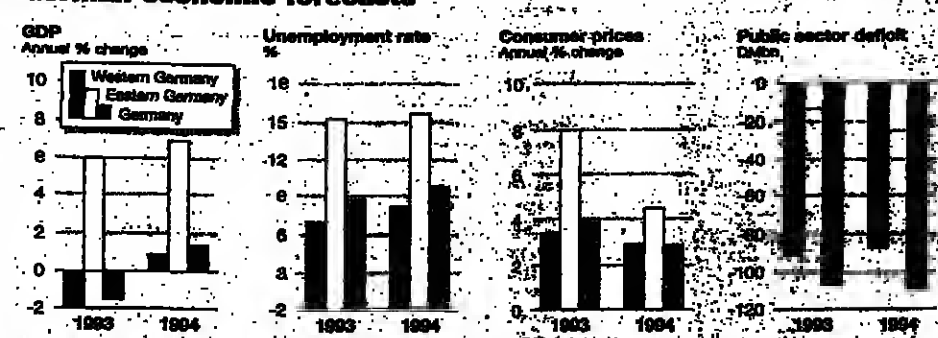
The Berlin-based Deutsches Institut für Wirtschaftsforschung (DIW) produced its own figures in an addendum to the report of the majority, suggesting that, far from a recovery in the German economy next year, it will continue to stagnate.

The disagreement between the DIW and the other five institutes which jointly produce the biannual economic forecasts goes to the heart of economic, financial and monetary policy in Germany.

The five expect an overall economic recovery, with a 1.5 per cent growth rate in the all-German figures - with 1 per cent in the west, and 7 per cent in the east. The DIW opts for a fall of 0.5 per cent in the west (compared with a fall of 2 per cent this year), and a rise of only 5 per cent in the east (compared with a 5.5 per cent rise in 1993). For Germany as a whole, the DIW forecasts mean zero growth for 1994.

Far from expecting a gradual but appreciable recovery fuelled by private investment, the DIW fears that long-term investment will continue to

German economic forecasts



decline, and that the turning point will come - at the earliest - around the middle of the year.

The institute concludes that instead of continuing to squeeze public sector spending, the government should switch to an investment stimulation programme. And the Bundesbank, far from continuing its slow but steady reduction in short-term interest rates, should accelerate the pace.

At the heart of the DIW argument, presented yesterday by Mr Heiner Flassbeck, the institute's chief economist, is the

persistent inverse structure of German interest rates: short-term rates, dictated by the Bundesbank's Lombard and discount rates, have remained stubbornly higher than the long-term capital market rates.

That means that short-term financial instruments remain more attractive for investors than long-term investments. The reason is a lack of adequate demand for long-term money.

The DIW estimates that a

reduction in the gap between short- and long-term rates would not be adequate to revive long-term investment activity. "Only with a normalisation of the interest rate structure will the economy be given the necessary impetus for growth," it says.

Long-term rates have fallen because overall demand for capital has fallen faster than the supply of capital. Industry is looking for less long-term capital to invest, because of depressed profit expectations. As long as those profit expect-

ations remain depressed, Mr Flassbeck argues, there will be no revival in investment, and it is up to the public sector to provide the necessary economic stimulus. Far from concentrating on reducing the public sector share in national income, as urged by the other institutes, the Bundesbank, and the government, it should be providing a stimulus.

Structural cuts in public sector spending - such as the social security cuts proposed by the government - should be carried out as soon as economic recovery is under way, but not before, he says.

The other five institutes - from Essen, Halle, Hamburg, Kiel, and Munich - are still critical of the government's financial and economic policy, but their analysis differs. "For a long time such policy has consisted of no more than ad hoc measures, without any medium-term concept," they say. "Financial policy is in an extremely precarious position." They forecast a 5 per cent growth in public sector spending this year and next, with an increase of only 3.5 per cent in tax and social security revenues. The result will be an increase from DM78bn (€31.7bn) to DM107bn in this year's public sector deficit (including the federal states as well as the central government).

The key reason is the level of transfers to east Germany, rising from DM150.3bn in 1992, to almost DM163bn this year and DM165.5bn in 1994, they say, as well as soaring unemployment benefit as jobless numbers approach 4m.

At the same time, revenues will be squeezed by the economic downturn. The five institutes call for a clear medium-term financial strategy, beyond the scope of the immediate social spending plans agreed by the government. They believe that the proportion of state spending must be clearly reduced to allow the attraction of private sector investment to increase.

The DIW disagrees. The immediate danger is not of a lasting increase in public spending. Such spending is dictated by the temporary needs of east Germany. But the current recession will only be aggravated by excessive cuts in public spending, before a recovery in private investment is in sight.

Pawlak picks Polish cabinet

By Christopher Bobinski in Warsaw

POLAND'S prime minister, Mr Waldemar Pawlak, yesterday named a new cabinet which he is expected to present to President Lech Walesa today. Approval is still uncertain.

Mr Pawlak heads the Polish Peasants party (PSL). If he has his way, Mr Marek Borowski, a former internal trade minister from the Left Democratic Alliance (SLD) - the PSL's coalition partner - will become deputy premier responsible for the economy.

It is yet to be decided whether the post would be linked with that of finance minister or whether the latter would be filled by Mr Henryk Chmielek, an accomplished financial administrator who is Poland's commercial counselor in Moscow.

Mr Włodzimierz Cimoszewicz, a supporter of the post-Communist SLD, has been named justice minister and deputy premier responsible for social policy. Mr Alexander Luczak, from the PSL, would be the education minister and deputy premier with responsibility for defence, and internal and foreign affairs. These are the three portfolios over which the constitution gives the president special powers.

Mr Andrzej Milczanowski would continue to serve as interior minister, while Mr Andrzej Olechowski, a former finance minister, would take over at the foreign ministry. Admiral Piotr Kołodziejczyk, defence minister in 1991, is expected to return to head the armed forces.

NEWS IN BRIEF

Citroën to shed more employees

Citroën yesterday said it was cutting 1,180 jobs from its 30,000 workforce in response to the depressed state of the European car market, writes John Riddling in Paris. They will be in addition to the 360 still to be shed as part of previous rationalisation plans by the French car company.

Most of the reduction is expected to be accomplished through early retirement, part-time employment and relocation of employees.

The French car market is forecast to contract by about 15 per cent this year in volume terms.

Cragnotti inquiry

Mr Sergio Cragnotti, the Rome businessman closely-linked to the Ferruzzi family, has been advised he is under investigation for alleged falsification of financial information, writes Robert Graham in Rome.

The move coincided with police raids on Mr Cragnotti's offices in Milan and Rome and the removal of documents for inspection by Ravenna magistrates. The latter, along with Milan magistrates, are conducting twin investigations into the affairs of the collapsed Ferruzzi empire, Italy's second largest private group.

Mr Cragnotti, chairman of the Lazio football team, currently runs his own agribusiness and foodstuffs trading company.

Romanian inflation

Consumer price inflation in Romania jumped to 291 per cent in September, its highest year-on-year rate since 1991, according to the National Statistics Commission, writes Virginia Marsh in Bucharest. Inflation had averaged 12 per cent a month in the first nine months.

Dutch TV venture

The European Commission has cleared a joint venture between Dutch PTT Telecom and Netherlands Omroepproductie Bedrijf, the country's main television facilities house. Reuters reports from Brussels. The new company will provide satellite news gathering services.

Paris puts on brave face over UK's nuclear 'Non'

By David Buchan in Paris

FRANCE claimed yesterday it would not let disappointment at the UK government's decision to cancel an air-launched missile project affect its desire for closer Anglo-French nuclear co-operation.

Paris had hoped London would join it in extending the range of an existing Aerospatiale air-fired missile into a nuclear weapon for both countries' air forces, in order to share costs.

But last week the UK, with an even stronger desire to save money, decided to abandon any such idea and to rely instead solely on its Trident nuclear submarines.

At a joint Paris news conference with his UK counterpart, Mr Malcolm Rifkind, France's

defence minister, Mr François Léotard, said diplomatically "we take note of it [the British decision], but we think it would be a pity to sacrifice what has been achieved in the nuclear dialogue between France and Britain over the past two years".

Both ministers praised the usefulness of this dialogue, which has focused chiefly on such issues as how and against whom Europe's two nuclear powers might consider using their atomic arsenals, as well as questions of nuclear non-proliferation and testing.

Mr Rifkind, who later today will visit France's nuclear submarine base at Brest, was slightly more open than UK ministers have been on the eventual possibility of the two countries' nuclear submarines

patrolling together, saying "discussion on this could not be excluded in the weeks and months to come".

However, a French official said yesterday: "With the British, it is always the same - the courtship is fine, but we never get into bed."

Collaboration on conven-

tional arms is easier, with the UK, France and Italy committed to building frigates together. Earlier yesterday, Mr Léotard took Mr Rifkind to his southern mayoralty of Fréjus and to Eurocopter, the Franco-German joint venture which hopes to sell its Tiger anti-tank helicopter to the UK. Mr Rif-

kind said it would take the UK a year from now to make its helicopter decision.

With his defence review drawing to a close, Mr Léotard said the new French government accepted a closer relationship with a reformed Nato, but gave no indication this might allow him to start

attending regular Nato meetings.

Mr Léotard said France had "an open attitude" to the possibility of extending Nato to east European countries, but felt that the Western European Union, converted by the Maastricht treaty into a defence arm of the EC, had to play a role.

Ukraine assures US about its atomic weapons

By Jill Sarashy in Kiev

UKRAINE'S President Leonid Kravchuk has assured Mr Warren Christopher, the visiting US secretary of state, that his republic is committed to becoming a non-nuclear power.

However, his foreign minister, Mr Anatoly Zlenko, has reiterated that Ukraine cannot dismantle all its nuclear weapons without \$2.8bn of western assistance.

While Mr Christopher reported that the Ukrainian parliament intends to ratify the Strategic Arms Reduction Treaty (Start I) next month in November, it is still unclear when it will dismantle its 1,666 nuclear weapons or accede to the Nuclear Non-Proliferation Treaty as a non-nuclear power - something President Kravchuk agreed to in 1992. Ukraine is currently the third largest nuclear power in the world.

In addition to financial assistance, Ukraine is looking to the US for security guarantees to protect its borders from neighbouring Russia through "an expansion of Nato". Said Mr Zlenko: "The sooner we receive aid and guarantees, the sooner Ukraine will follow through with its commitments."

Mr Christopher responded that "security assurances

would certainly be within contemplation", once Ukraine became non-nuclear.

An agreement was expected to be signed last night to release \$175m for Ukrainian nuclear dismantlement.

At yesterday's news conference two small accords were also announced for enhancing the safety of Ukrainian nuclear power stations and for establishing a science and technology centre to keep highly-trained Ukrainian nuclear scientists well-paid and working in the republic.

Mr Christopher also came to promote economic ties between the two nations, offering \$160m in agricultural credits and technical assistance for 1994. The US plans to expand trade and private investment through lowering tariffs on Ukrainian goods and helping the republic join the General Agreement on Tariffs and Trade.

Reuters adds from Washington: President Bill Clinton said yesterday he would continue to press Ukraine to dismantle its nuclear arsenal.

"I understand their position, but I think it is not justified, because we are making progress with Russia too in complying with all these agreements," he said.

Mr Solbes said that although the government preferred to negotiate these issues it would act unilaterally if necessary and bring the required legislation before parliament by the end of next month. The government would "not renounce" its plans to peg salaries to below the inflation index over the next three years. Overhaul of labour legislation was also "an essential point" of the government's policy.

Spanish doubt on further cut in interest rates soon

By Tom Burns in Madrid

SPAIN'S economy and finance minister, Mr Pedro Solbes, has warned that benchmark interest rates in Spain, now at a historic low of 2.25 per cent, are unlikely to fall further in the immediate future.

In an interview with the Madrid business newspaper Expansion to be published today, Mr Solbes said: "In the present conditions we have pretty well reached the limit on interest rate reductions. It is difficult to determine the absolute limit but we are pretty close to it."

He added, however, that

external factors such as a further cut in French interest rates and a fall in German inflation could give Spain's monetary authorities "a certain room for manoeuvre".

The only domestic factor that would allow a lowering of Spanish rates, Mr Solbes said, would be an agreement on wages restraint and on reform of the rigidities of the labour market.

Discussions between the government, employers and unions on an incomes policy and on the labour laws are due to begin tomorrow.

None of the three parties in the talks holds much hope for an agreement but Mr Solbes

issued a clear warning that the government was determined to bring about wage restraint as well as labour market changes aimed principally at reducing the cost of dismissing employees.

Mr Solbes said that although the government preferred to negotiate these issues it would act unilaterally if necessary and bring the required legislation before parliament by the end of next month. The government would "not renounce" its plans to peg salaries to below the inflation index over the next three years. Overhaul of labour legislation was also "an essential point" of the government's policy.

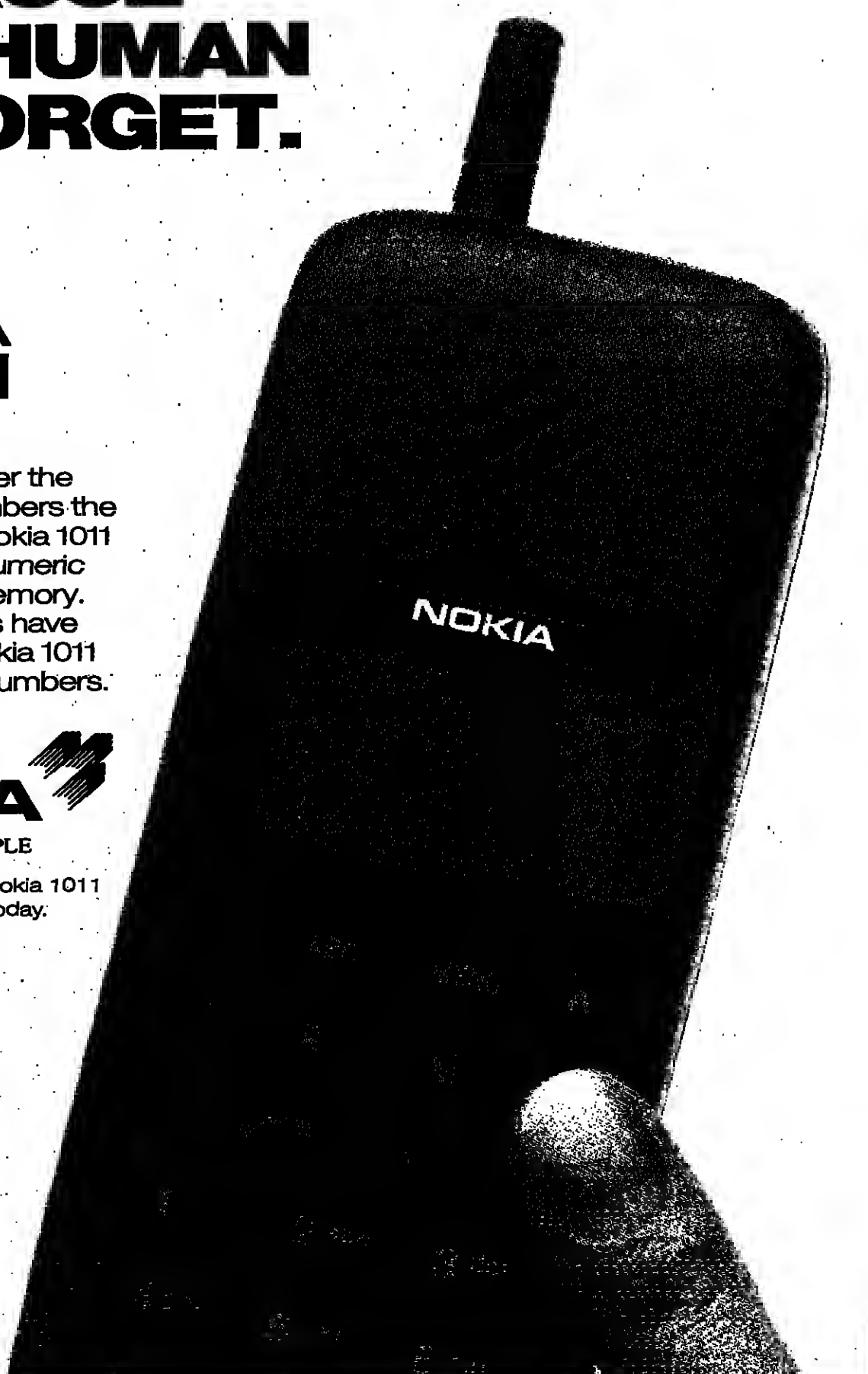
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NEWS: INTERNATIONAL

Israel begins to free Palestinians

By Julian Ozanne
in Jerusalem

ISRAEL yesterday freed hundreds of Palestinian prisoners at the beginning of a mass release aimed at bolstering the Israeli-Palestinian peace process and winning over Palestinian opponents.

However, Mr Yitzhak Rabin, Israel's prime minister, cancelled the release of members of the Islamic fundamentalist Hamas and Islamic Jihad movements, after the abduction and killing of two Israeli soldiers in the occupied Gaza Strip on Sunday by the Hamas' military wing.

Both groups reject the peace accord and have vowed to fight against it. Mr Rabin also told a parliamentary committee that "prisoners with blood on their hands will not be released".

By the end of today Israel plans to have freed up to 700 prisoners, mostly the sick, women, youths and men over 60, as a first step in the phased release of up to 14,000 Palestinians held in Israeli jails.

Most of those released this week have been imprisoned on minor "offences" such as membership of a banned or "hostile" organisation, demonstrating and throwing stones.

Thousands of relatives crowded at the Erez checkpoint crossing into Gaza and cheered as buses delivered prisoners to their freedom. Palestinians in the West Bank and Gaza closed stores and observed a one-day strike to



Palestinian women at a demonstration yesterday hold pictures of their detained sons and husbands

press for further releases.

The Palestine Liberation Organisation sees the release of prisoners as key to confidence-building between the two sides in talks on implementing the peace accord which resumed in the Egyptian Red Sea resort of Taba today. The PLO is demanding a much swifter release of all prisoners held on non-life threatening charges and is calling for the

release of prisoners of all groups, including Hamas and its leader Sheikh Ahmed Yassin.

The release of Hamas activists, however, has drawn a barrage of criticism from the Israeli public. Opposition to the freeing of Hamas prisoners is likely to grow after the incident in Gaza on Sunday and release yesterday of a leader by Hamas which called the killing

of the two soldiers their "gift to the peace process" and proclaimed: "There is no peace between us and the Israelis except in the cemetery."

Despite the PLO's insistence on the release of all prisoners regardless of their political affiliation, Israeli officials believe there is a growing opportunity to drive a wedge between moderate and secular Palestinians, who support the

peace process, and the rejectionist and Islamic fundamentalist groups opposing it.

Mr Rabin also told the parliamentary committee yesterday that Palestinian attacks against Israelis had fallen dramatically since the signing of the peace accord last month.

Attacks in Gaza were down this month to 30, from 60 in September, and in the West Bank to 44, from 59 last month.

Commonwealth seeks to push role of reform

By Michael Holman
in Limassol

THE COMMONWEALTH last night moved to carve out a new role for itself as a pressure group for international economic and political reform.

In a communiqué at the end of the five-day biennial summit, the Commonwealth leaders called for urgent trade reform, improved debt relief terms for poor countries and action on human rights.

The conference was the first for 20 years not to be dominated by South Africa, and the 50-member body was seeking a new cause.

It was also coming to terms with its limitations, acknowledging that its capacity to resolve even its own members' disputes, whether Cyprus or Kashmir, is often slight.

South Africa remained high on the agenda, with the conference communiqué welcoming the fact that the changes undertaken marked the "irreversible" ending of apartheid, but warning that the transition to a democratic government was "fragile".

Commonwealth leaders announced plans for a 60-70 strong team to help monitor next April's scheduled general election. But talks on South Africa were free of the

tension and acrimonious exchanges that characterised the sanctions campaign.

Instead, Mr Paul Keating, Australian prime minister, together with Mr John Major, his UK counterpart, helped galvanise the Commonwealth into action on trade, with talks dominated by ways of securing a successful end to the Uruguay Round of world trade talks by the mid-December deadline. As a result, a Commonwealth delegation of trade ministers is to tour the world's leading capitals to press the case for agreement.

The other key issue was debt relief. Mr Major urged a write-off of up to 80 per cent of official debt of developing countries embracing economic reform programmes endorsed by the World Bank and IMF.

The communiqué also promised renewed emphasis on the need for democracy and respect of human rights among member states, but it resisted suggestions that members should be monitored and violations publicised.

Mr Thabo Mbeki, ANC chairman, invited the Commonwealth to be a watchdog in post-apartheid South Africa but the conference did not follow up his offer.

Other inconsistencies

remain. A delegation from Chief Moshhood Abiola, winner of Nigeria's annulled presidential poll last June, was refused a hearing, while delegates of the military-backed government took their seats.

Cameroon's application for membership will be accepted in 1995 provided it has met the Commonwealth's professed standards, yet when existing members such as Sierra Leone flagrantly breach them, they pay no penalty.

For all the body's shortcomings, however, leaders still think it is worth their time. Ms Benazir Bhutto felt the conference important enough to fly in just 48 hours after her victory in the Pakistan election.

Meanwhile, its numbers are growing. When the conference reconvenes in 1995 South Africa will have rejoined, Cameroon could be re-admitted and Mozambique will almost certainly have its application on the table.

By then the observation of Mr Major will have been put to the test: "What we cannot do, we should not pretend to do... but what we do decide to do, we must do well."

He was talking about the UN, but the words apply with equal force to the Commonwealth.

Inside the prisons of the intifada

David Horowitz on life in the jails of the occupied territories

WELCOME to the detention centre, says the sign in Hebrew outside Gaza's Ansar II prison, presumably for the benefit of Israeli soldiers unfortunate enough to be stationed there.

Underneath, the same message in Arabic has greeted the thousands of *intifada* offenders who have passed through the gates since the Palestinian uprising against Israeli occupation broke out in late 1987.

Ansar II, in common with the other jails in Israel and the occupied territories where Palestinian prisoners are held, is a dump—a coastal sprawl of tents, concrete offices, barbed-wire fencing and olive-green watch towers.

It is a dump, though, that is nearing the end of its life. Under an agreement reached by Israeli and negotiators for the Palestine Liberation Organisation last Thursday, Israel yesterday released 700 Palestinian detainees—the old, the young, the sick and the women.

In the weeks and months ahead, almost all the 10,000 or so Palestinians now in jail are

to be freed. Only a few hundred inmates "with Israeli blood on their hands" may be kept in custody.

Some of those identified with Yasser Arafat's mainstream

Far from being a deterrent, a term in one of these centres is essential to the political credibility of any self-respecting Palestinian activist

Fatah faction of the PLO, such as Salim Zdrri, released earlier this week after 23 years in Israeli captivity, may become leading supporters of the Israeli-PLO autonomy programme.

Others, though, members of Hamas and the rest of the Palestinian rejectionist groups, will be the peace accord's most dangerous opponents.

Inside Ansar II, as at the other jails, the Fatah and Hamas inmates are kept strictly apart.

The bearded, sullen men of Hamas have the worst conditions, sleeping in crowded

cells, crammed into a narrow compound that allows little space for exercise. Most of the Fatah detainees, by contrast, sleep in squat concrete buildings—also inside fenced-off

compounds, but with more room to walk around, room, too, for table-tennis tables supplied by the Red Cross.

Ansar II is a holding jail with space for just a few hundred, a first stop for alleged offenders, from killers to graffiti artists. Brought in for questioning, they can then be held, tried, transferred or freed.

Life in the compounds is dull but not especially harsh. The Red Cross ensures that the food is good. The Israelis are non-intrusive beyond calling the prisoners together twice a day for roll-call: inmates squat on their haunches in lines, and

bob up when their names are called.

But in a nearby interrogation centre, run by the Shin Bet security service, there are no niceties.

The first stage of a Shin Bet interrogation routinely involves a prisoner being blindfolded, handcuffed behind his back and left to stand outside for hours.

Those who don't co-operate can be kept for days, alone or in pairs, in tiny, filthy cells, defecating into plastic buckets. The Israeli human rights group, B'Tselem, has documented several cases of alleged torture by the Shin Bet at Ansar II.

Friday is visiting day. Long lines of anxious Palestinian mothers wait to spend a few minutes face-to-face across a wire grill—with their sons. For most prisoners this is the only chance to leave the compounds; only the *shawish*—the Palestinian trustee in each compound through whom all communication with the Israelis is conducted—can move move freely around the jail.

The Israelis are not proud of Ansar II or the other prisons

like it. When Israel television was preparing a news report on prisoner releases this week, it had to resort to archive footage of the Ketziot jail in the Negev Desert: the military authorities would not allow a camera crew inside any of the jails to shoot fresh film.

The Israelis are also acutely aware that the prisons have served only to re-inforce opposition to the occupation.

Far from being a deterrent, a jail term is essential to the credibility of any self-respecting Palestinian activist.

It is richly ironic that, with the dawn of Palestinian self-rule, many of those PLO loyalists now serving their final week inside Israeli jails may well soon be joining the Palestinian police force—working alongside the Israeli military authorities to ensure a smooth transfer of power from Israeli to Palestinian hands in the occupied territories.

The Israeli authorities do not normally allow reporters into prisons for Palestinians. David Horowitz saw Ansar II from the inside while serving there as an Israeli army reservist last year.



British prime minister, Mr John Major, talks with Commonwealth secretary general Chief Emeke Anyanwu before yesterday's morning session of the Commonwealth conference

The Cyprus communiqué

The Commonwealth heads of government met in Cyprus from October 21 to 25. Of the 47 countries that attended the meeting, 36 were represented by heads of state.

Global Trends and Prospects

Heads of government welcomed continued easing of global tensions and expressed conviction that the United Nations was now better placed than ever before to fulfil its role.

They underscored the complementary role which the Commonwealth and regional organisations could play in supporting the efforts of the UN.

They reaffirmed their commitment to democracy, fundamental human rights, the rule of law, the independence of the judiciary and just and honest government as essential ingredients of the Commonwealth's fundamental political values.

Democracy, development and respect for human rights and fundamental freedoms were inter-dependent and mutually reinforcing.

Commonwealth leaders stressed the need to strengthen international security through disarmament and non-proliferation.

They noted the world economy faced grave uncertainties but believed the current climate of low inflation and declining interest rates presented opportunities for economic recovery.

They welcomed the broadening political consensus on market-friendly measures, combined with human resource development and poverty reduction.

They acknowledged special difficulties of sub-Saharan Africa and noted the performances of many countries were constrained by weak commodity prices and deteriorating terms of trade.

Big efforts were still required throughout the developing world to overcome institutional, economic and financial barriers to stronger growth; they also recognised these reforms should be supported by an appropriate blend of adjustment and external financing.

They expressed disquiet at the continuing debt problems of many developing countries and called for measures to cut the debt burden to sustainable levels and for the full implementation of the Trinidad Terms.

They noted with concern that official development assistance had fallen in real terms and called for action to reverse the fall in aid flows.

Commonwealth leaders noted with appreciation numerous practical measures undertaken by the Secretariat to promote the Commonwealth's fundamental political values, including monitoring elections in seven member states.

Mozambique

Leaders expressed concern at recurring delays in implementing the October 1992 peace accord and called on the Renamo opposition party to comply fully with its terms, including despatch of its personnel to UN-administered assembly points. They urged all concerned to co-operate in ensuring multi-party elections are held by October 1994 and called on Renamo to co-operate with the government in the speedy completion of an election law.

Angola

They deplored continuation of the civil war and called on Unita to end hostilities. Failure on the part of Unita to comply with UN Security Council resolutions on Angola would justify further sanctions and other measures.

Cyprus

Commonwealth leaders reiterated support for the independence, sovereignty, territorial integrity, unity and non-aligned status of the republic of Cyprus.

They stressed the importance of securing compliance with all the UN resolutions on Cyprus, and emphasised the need for speedy withdrawal of all foreign forces and settlers from the republic of Cyprus, and the return of the refugees to their homes. They expressed concern over population change caused by the continued influx of Turkish settlers resulting in changes in the demographic structure of Cyprus.

Commonwealth leaders expressed deep disappointment that an agreement on a package of confidence-building measures has not been reached due to the negative attitude of the Turkish Cypriot side.

They supported the intention expressed by the UN secretary general that unless progress was made on the Cyprus problem he would request the Security Council to consider alternative ways to promote effective implementation of the Council's resolutions on Cyprus.

Middle East

Commonwealth leaders welcomed the agreement of 13 September 1993 between the government of Israel and the Palestine Liberation Organisation and expressed the hope that the momentum for peace would be sustained.

Bosnia-Herzegovina

They expressed deep concern at the continuing hostilities and violence and urged the international community to make all efforts to arrive urgently at a just, equitable and comprehensive political settlement based on strict adherence to Security Council decisions, international law and the preservation and protection of the legitimate rights and dignity of all the Bosnian community.

Belize

Support was reaffirmed for the security, sovereignty and territorial integrity of Belize. The Commonwealth leaders urged Guatemala and Belize to resume and successfully conclude their dialogue.

NEWS IN BRIEF

Hijackers seize Nigerian aircraft

HIJACKERS claiming to be supporters of Nigerian politician Moshhood Abiola yesterday seized a Nigeria Airways Airbus with 149 people aboard, and demanded Mr Abiola's installation as president, airport officials at Niamey said. Reuters reports from Niamey.

Nigerian officials said there were five hijackers and that the chairman of the National Electoral Commission Okon Uya and former oil minister Jibril Amin were on the aircraft.

Aides for Mr Abiola, widely believed to have won presidential elections last June which were annulled by the then-military government, said he had nothing to do with the hijack.

The hijackers freed 30 passengers and two hostages at the airport in Niamey, the capital of neighbouring Niger, leaving 107 passengers and 10 crew aboard.

Iran curbs civil servants

Iran's parliament has passed a law banning government employees from a wide range of activities, including unauthorised contact with foreigners and membership in freemasons' organisations, according to Iranian Radio, Reuters reports from Niamey.

The radio, monitored by the BBC, said the new law detailed a wide range of administrative offences and provided guidelines for professional conduct by government employees.

Rival Somali clans clash

Fighting broke out between rival clans in Mogadishu yesterday, scattering crowds marching to a planned peace rally, witnesses said, Reuters reports from Mogadishu.

Several Somalis were reported to have been wounded. Fighting broke out when guerrillas loyal to Mohamed Farah Aided fired at the crowd as it neared the edge of his southern fiefdom. Gunmen from the north returned fire, some hurling grenades.

Terre Blanche convicted

A South African court yesterday convicted right-wing extremist Mr Eugene Terre Blanche of public violence during a demonstration against President F W de Klerk. Reuters reports from Johannesburg. Three white extremists were killed in clashes between right-wingers, police and black passers-by when Terre Blanche's Afrikaner Resistance Movement (AWB) tried to disrupt a speech by Mr de Klerk in August 1991.

Boost for Karachi shares

The KSE-100 index on the Karachi Stock Exchange, Pakistan's largest stock market, yesterday broke through the 1500 point level, after a week-long rise, writes Farhan Bokhari from Islamabad. The index gained 15.76 points on the day to close at 1501.44 in a rise which began last week, following Ms Benazir Bhutto's appointment as prime minister.

JAPANESE ECONOMY

Department stores post 6.7% decline in sales

By William Dawkins in Tokyo

INDICATIONS of a small pick-up in Japanese retail sales were yesterday disappointed when department stores reported a 6.7 per cent decline in sales for last month.

The year-on-year fall, for the 19th month running, came despite the apparent popularity of a series of sales drives in mid-September, the Japan Department Stores Association said. Demand from corporate

buyers was weak, while private customers' sentiment was damped by the string of typhoons to hit Japan over the past month.

Further evidence of the extent of Japan's recession emerged on the first day of a three-day conference of regional managers of the Bank of Japan, the central bank. Companies across the country reported a sharp decline in export volumes because of the yen's strength, said managers.

Corporate profits were still being revised downwards and demand for capital was weak.

Separately, Mr Hiroshi Kamagata, the minister of international trade and industry, hinted that if the economy failed to improve, the government would consider further pump-priming measures, on top of the two packages so far this year. He told Japan's foreign trade council that the packages did not appear to have worked well.

Indonesia's ruling party elects civilian chairman

By William Keeling in Jakarta

INDONESIA'S ruling Golkar party yesterday sought to distance itself, at least publicly, from the military by electing a civilian as its chairman for the first time.

He is Mr Harmoko, currently Information Minister and a close confidant of President Suharto. The election, at the end of a five-day party conference, was backed by the president, who saw his own grip over Golkar tightened with the appointment of two of his children to its executive board.

Indonesian politics is a notoriously closed-door affair in which outsiders are given few clues as to what the changes in leading personnel mean.

Diplomats believe, however, that there is a growing rift between some armed forces officers and 72-year-old President Suharto over the choice of



President Suharto: tightens grip on ruling Golkar party

the president is trying to reduce the military's role in Golkar.

The armed forces, however, remain the dominant political force in Indonesia and their members control many of Golkar's important provincial branches.

The promotion of civilians within Golkar's central leadership may cause some resentment.

In particular, the appointments of Ms Siti Hardiyanti Rukmans and Mr Bambang Trihatmodjo, children of President Suharto, to the 45-member executive board is likely to spark widespread debate.

Both have enjoyed successful business careers, establishing companies in the early 1980s which currently have a combined annual turnover of several billion dollars. Until now, however, they have kept a low political profile.

Japanese pledge on construction contracts

Gatt fears ease over procurement hurdle

By David Dodwell, World Trade Editor

SIGNIFICANT new offers to open up national procurement markets were tabled in Geneva yesterday, reducing concerns that disputes over the issue will jeopardise progress towards successful completion of the Uruguay Round of world trade liberalisation talks.

Japan tabled proposals to open up domestic construction contracts, both national and regional, to international competition. This has been a sticking point between Japan and the US in protracted bilateral negotiations in Tokyo in recent weeks.

The US has also bowed to European Community pressure to include sub-federal procurement business in the package being negotiated. A new US offer gave assurances that contracts from "entities from all 50 states" would be subject to foreign competition.

The US has yet to say which entities these are, but inclusion of sub-federal bodies looks like good news, an EC negotiator said yesterday.

Officials in Geneva yesterday were perplexed by suggestions that disagreements over opening up the telecommunications sector had triggered a crisis in talks. On the contrary, they noted the US and the EC had

agreed a memorandum of understanding in May this year giving telecommunications off from the procurement package. A joint study of the sector is in progress, with a bilateral agreement targeted for March next year.

"It is true that telecommunications was formally withdrawn today," an EC negotiator said. "But that was purely a technical matter and a surprise to no one."

The US and EC have been sparring over government procurement rules for months. The US claims that bidding opportunities worth \$16.8bn (\$11.1bn) were offered to EC contractors under the Gatt government procurement code in 1990, compared with only \$7.8bn in EC contracts open to US companies.

The EC agrees that, in absolute terms, the 1990 Gatt figures confirm the US is more generous; but Brussels officials argue the value of EC contracts open to US companies rose sharply between 1985 and 1990, while the value of US contracts fell over the same period.

Following withdrawal of telecommunications, talks have focused on three areas: access to contracts awarded by central government, ranging from works contracts to goods and services; access to similar con-

tracts awarded by local or sub-federal bodies; and contracts in the utilities sector, excluding telecommunications. These include electricity, gas, water and transport.

The EC yesterday "fleshed out" its procurement offer by detailing the 12,000 national and local bodies which would be subject to the agreement.

Other countries had not yet presented such detailed offers, "but there seems a fair chance we can get substantial liberalisation at a sub-federal level", an EC negotiator said.

A US negotiator said the details of the US offer at a sub-federal level remained "very fluid", adding: "We are working intensively with states seeking commitments, but we don't want to force things on them."

Disagreements have also narrowed over the threshold level at which contracts will have to be opened up to competitive bidding, particularly in the construction sector. The US, which has consistently pressed for the lowest thresholds, has apparently raised its proposal closer to the majority preference for \$4.5m per contract.

More significantly, Japan has agreed to lower its proposal for a \$15m threshold. It has not offered a new figure, which "is being negotiated internally", an official said in Geneva.

Carmakers to fuel new US export region

WHEN Mercedes Benz, the German luxury carmaker, recently chose Alabama as the site of its new American assembly plant, it joined an increasing number of manufacturers, large and small, that have identified the American south-east as a good place to make and export their products.

Mercedes says it intends to export half the Range Rover sports utility vehicles it will produce in Alabama. BMW, its main German competitor, also aims to export about half of the new line of cars it will begin assembling in neighbouring South Carolina in 1995.

The two big car companies are likely to lead the region's export figures. But exports from the south-east have already been picking up in recent years as the region has undergone a transformation from a low-tech industrial backwater that once produced mainly for the domestic market.

Over the past decade pockets of high technology have developed and the motor industry, especially from Japan and Europe, has moved in to take advantage of its relatively low production costs.

While a number of the recent investors are multinational companies such as Nissan, Robert Bosch, and Michelin, which export routinely, many small and medium-sized local companies are discovering overseas markets, according to economic development officials and experts in the region.

Between 1991 and 1992, exports from eight south-eastern states - North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Kentucky and Tennessee - grew at more than twice the rate of the nation as a whole. Exports from south-eastern states rose 13.5 per cent, from \$44.9bn to \$51bn, while those for the nation as a whole grew a little more than 6 per cent, from \$421bn to \$449bn.

This surge in export activity has caught the eye of regional bankers, who are focusing new attention on trade services, particularly to small and medium-sized companies. Trade experts note that this is an especially welcome development because, next to finding a market, finance is a small exporter's chief problem.

After a period of massive expansion by acquisition, First Union can sell these customers an array of other services that make the overall relationship profitable, says Mr Ollivier.

First Union had previously left the field open to its biggest competitor, Nationsbank, the fourth-largest US bank, also based in Charlotte. Nationsbank has an already well established reputation among small companies. "But", says Mr Erwin Carter, Nationsbank's chief of trade finance, "the challenge with a bank this size is and will continue to be on the customer service side."

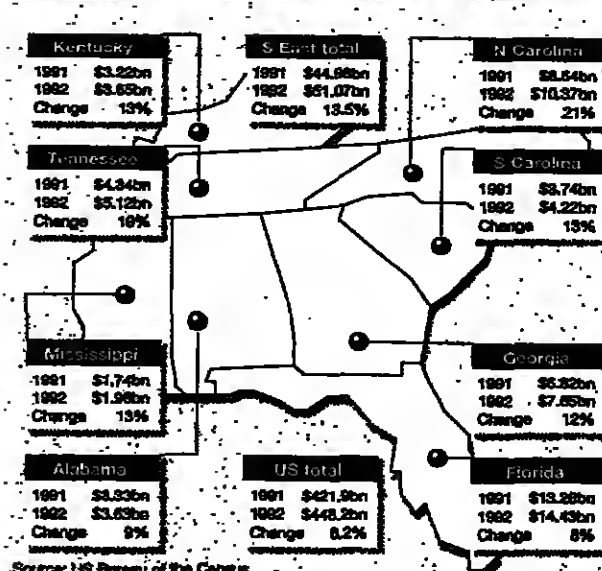
Small exporters frequently complain that they are given short shrift because their transactions are relatively tiny and that dealing with big bank bureaucracies takes too much time.

The creation of a new, small British-owned bank that promises better service looks set to provide some added competition. AmTrade International Bank, with branches in Atlanta and Miami, began operating earlier this year under a bank holding company controlled by Sir Michael Sandberg, former chairman of the Hongkong and Shanghai Bank. It is targeting small and medium-sized exporters in the South East and is almost exclusively devoted to trade finance.

Sir Michael is building AmTrade on the foundation of a \$6.5m acquisition of First American Bank of Miami, which had a thriving trade finance operation largely with Latin America.

State-level economic development officials, anxious to raise their state's exports, are hoping that more bank competition will mean better trade services for small companies. Tougher competition would be good, says Mr Charles Schroder, chief of export promotion for the Georgia Housing and Finance Authority.

Exports from the south-eastern states



Source: US Bureau of Economic Analysis

Siemens powers ahead in China

By Andrew Baxter

SIEMENS, the German electrical and electronics group, is expanding in the Chinese power plant market through a joint venture to make instrumentation and control (I&C) equipment there.

The venture, Siemens Power Plant Automation, will be 60 per cent-owned by Siemens, with the balance held by Nanjing Electric Power Automation Equipment General Factory, controlled by the Chinese ministry for the electric power industry.

The venture will be based in a special economic zone in Nanjing, 150 miles from Shanghai, and will employ about 100 people when fully established.

It will focus on producing, selling and servicing the Teleperm ME process control system, developed by Siemens for large power plants, but will subsequently also produce hardware such as electronic equipment cabinets.

The joint venture is the latest in a string of link-ups between western and Chinese power equipment suppliers, prompted by China's surging demand for power capacity. Advanced I&C equipment increases the reliability, cost-effectiveness and service life of plant while reducing fuel consumption and emissions.

The tie-up replaces Nasir, another venture set up in 1991 by KWI, the Siemens power equipment subsidiary, with the same partner.

Siemens said preparations were under way for further joint ventures in China.

French managers back Gatt peace

By David Buchanan in Paris

MOST French employers would prefer their government to make a compromise, even a "mediocre" one, in the Gatt trade negotiations, rather than risk isolating the country by opposing a Gatt deal, according to an Ifop poll published in *Le Monde*, a business daily, yesterday.

The Ifop polling organisation found that 79 per cent of the top managers of 408 companies canvassed last week backed compromise, and that 67 per cent believed the government was paying undue attention to farmers' interests to the detriment of industry and the service sector.

The poll is another sign that

the mood for compromise is gaining ground in France, with more than half (54 per cent) the employers believing a Gatt deal would help pull France out of recession. But it is typical of this silent majority of French businessmen that they are only ready to reach their goal - Gatt views to the anonymity of an opinion poll, because these views are still at odds with general public sentiment.

In a EYF poll for France 2 television, two-thirds backed prime minister Edouard Balladur's tough public stance on Gatt. Eighty-one per cent believed a Gatt deal on present terms would endanger French farming, while 75 per cent felt it would reinforce American economic dominance.

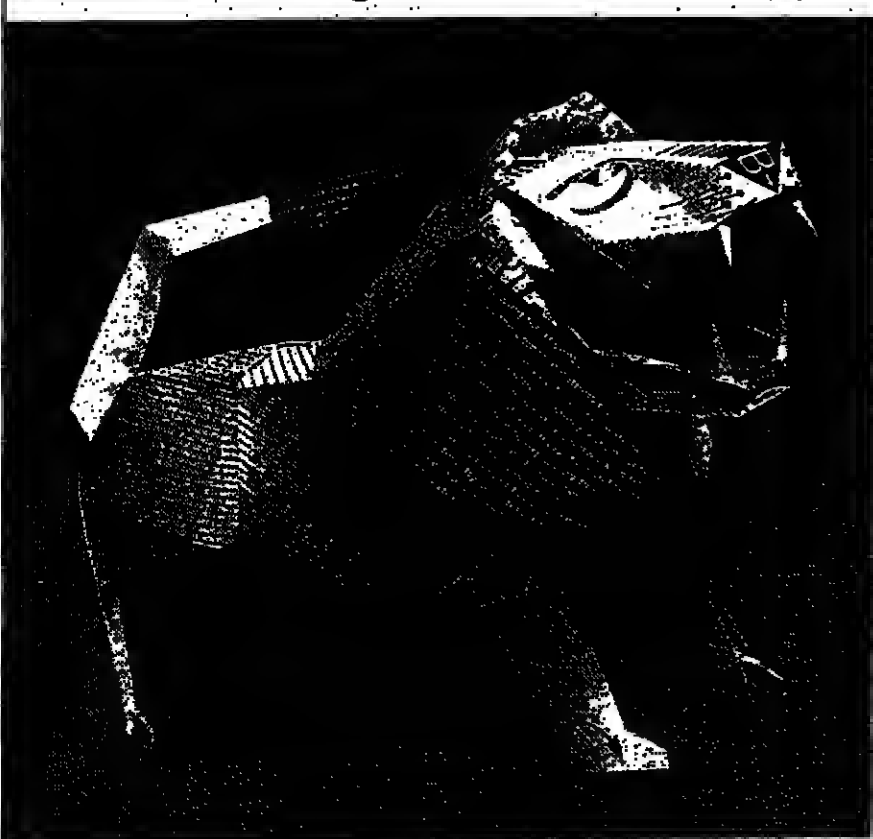
Ciba in Shanghai venture

CIBA, the Swiss pharmaceuticals and chemicals group, has initiated a SFr34m (£15.8m) animal health joint venture near Shanghai, writes Deborah Harcourt.

The plant, which will produce drugs for treating parasites in animals, is part of the group's SFr50m animal investment programme in China over the next three years. Ciba aims to become the first western chemicals business to set up its own Chinese holding company; it has 20 projects in the country and is setting up a further seven joint ventures, including a \$100m (£46.2m) plastic additives plant in Shanghai.

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HEWLETT PACKARD

"The small twin engine Beecher air shock like a toy plane in the wind as we headed for that Australian gold mine. My heart was in my throat when we skidded to a landing in a small clearing, and I thought of my cosy office back in Zurich", says Rolf Eckert, Project Finance, UBS. "But of course you can't manage a \$120 million syndicated loan from your desk."

Not banking as usual.



مكتبة ابن الجوزي

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IMPORTANT TO THE SUCCESS OF YOUR BUSINESS.
WHICH IS WHY THEY SHOULD LEAVE.



Outsourcing means that your
IT staff leave your company.
But only to become part of ours.

Meter readers go remote

The days of the peripatetic meter reader could soon be numbered in Britain as new technologies are developed to take readings remotely and dispense with the human eye.

Instead of utility officials having to enter homes, factories and offices to measure the amount of water, gas or electricity used, future readings could be taken from moving vehicles through low-power radios from transmission devices on the meters.

Meters could also be read down the mains electricity network, with information sent back to users, if necessary, about new charges or rates of consumption.

At present, these technologies are still in the trial stage, the main interest being shown by the water industry.

Aid-Cell, which makes medical alarms for the aged, will start installing its meter-reading devices later this year for tests. In the US, remote meter reading is common.

But Terry Giles, Aid-Cell's technical director, says tougher UK and continental European regulations and the use of different frequencies for meter-reading radios than in the US means different equipment is needed.

Aid-Cell, part of Compagnie Générale des Baux, the big French water and communications concern, has spent three years developing its product, called Ramar. It uses transponders to obtain the readings through low-power radio.

Giles says remote metering technology needs to be cheap since so many devices have to be installed. Ramar has just gone into partnership with Kent Meters, which makes more than 7m meters a year for the world market.

The companies will work on a radio-assisted, hand-held reading system capable of reading meters up to 50m away and a mobile system to obtain readings in vehicles moving at up to 50mph from distances of around 100m.

In Somerset, Wessex Water plans tests on a different system, developed by Remote Metering Systems, half-owned by Scottish Hydro-Electric. Tom Hoston, Wessex's commercial services manager, says the trial will show whether meter reading by electricity works over long as well as short distances.

Andrew Fisher

R&D in a tussle over EC funding

Member states have a contradictory approach towards the next five-year spending plan, writes Andrew Hill



Europeans will hear a lot about the role of science and technology in the weeks ahead.

This month, the European parliament welcomed Europe's scientific and industrial elite to a two-day "science summit" in Brussels. At the end of November, the European Community will sponsor a week of "scientific culture" in an attempt to improve the general understanding of science and technology through a series of conferences, competitions, open days and exhibitions across Europe.

Meanwhile, in a somewhat less celebratory atmosphere, EC research ministers are trying to decide on the size and shape of the next five-year "framework" programme of EC-funded research and technological development, to run from 1994 to 1998.

The framework programme is the EC's fourth since 1984, and the European Commission's proposal for Ecu1.1bn (£10.2m) of funding makes it look like the biggest so far. The 1990-94 framework programme - which will overlap its successor - was worth Ecu0.6bn. But appearances are misleading: R&D spending remains pegged at about 4 per cent of the overall EC budget.

The Commission may have to struggle to prevent member states from chipping away still further at that figure. When EC research ministers met in Luxembourg recently for their first substantive discussion of the Commission's plans, nine member states backed a figure of Ecu1.1bn. But the Community's three largest paymasters - Britain, France and Germany - said it should be reduced by Ecu0.1bn or more. The proposals require the unanimous approval of the 12 member states.

Antonio Ruberti, an engineer by training and former Italian minister for research and university affairs, took over responsibility for the EC programme of science, research and development at the beginning of the year with a two-year mandate. He wants to move quickly, but so far is clearly frustrated by the apparent contradiction between member states' desire to improve economic performance and their grudging attitude towards research spending.

"When it comes to earmarking resources to be devoted to research in individual member states and in the Community, all sorts of difficulties arise which are not consistent with the principle of subsidiarity to the strategic role of research," he told a Brussels press conference.

Part of the problem is that some governments still have lingering doubts about the value of the EC's framework programme. After nearly a decade, critical observers are bound to ask why a programme aimed at improving the performance of EC industry against US

framework programme and is already discussing what may be required. Under the fourth framework programme, specific proposals for basic research will be considered for funding.

Similarly, in the field of industrial technologies, which would take up 16.5 per cent of the proposed budget, the Commission hopes the EC will fund technologies which might help equip the "factory of the future", while the Ecu1.32bn channelled towards "life sciences" would focus on the use of biomedicines in the fight against AIDS.

A further Ecu0.58m will be devoted specifically to disseminating and exploiting the results of research projects, so that EC companies actually benefit from Community-funded innovation. A special effort will also be made to co-ordinate Community and national R&D strategies, helping to end the framework programme's reputation as an unlucky "13th" research effort.

The speed with which the Commission has produced these outline proposals has a political purpose. Following ratification of the Maastricht treaty, the fourth framework programme will be one of the first Commission proposals subject to a new and complex legislative procedure involving consultations between European parliament, ministers and Commission. If, as seems possible, ministers and Euro-MPs disagree on the size of the research programme, then there is a risk that implementation will be delayed. "This [working document] is so that nobody can say that the Commission has not made its suggestions and ideas clear," explains one Brussels official.

What is already clear from the Commission plans is that Ruberti wants to avoid the same traps as his predecessors. Whether he succeeds may not be apparent until long after his 24-month mandate expires - and a great deal of EC money has been spent. Member states will have to decide, probably before the end of this year, how much cash they are prepared to risk to carry out those ambitions.

Technically Speaking Contest for an industry's future

By David Alden

THE spectacle of the French Minister of Industry, Gerard Longuet, hawking round the chairmanship of Groupe Bull, with few takers, as he wrestles with the restructuring of the computer concern is highly diverting - in more senses than one.

For while the EC Commission concentrates on the aid being offered, the real contest for the future of the computing industry is being fought elsewhere. Europe is not even in the game.

The US, however, plays to win. Flattering giants such as IBM, Unisys, Digital and Wang are left to find their own salvation. In the country that sets the agenda for information technology - for users and providers - action is centred on establishing leadership in new techniques for computing.

In the vanguard of such action was the Defence Advanced Research Projects Agency, set up in the Sputnik era of the 1950s. DARPA instigated a strategic computing programme in the early 1980s that helped supply users with new parallel processing systems, including 68 from two vendors, Intel and Thinking Machines, in a programme now running at \$150m (\$32m) a year.

Such single-minded concentration of this largesse on just two suppliers linked the powerful House of Representatives Committee on Armed Services, which instigated a General Accounting Office enquiry.

Its May 1993 report criticised the way the programme had been run, especially its hardware procurement, but not its goals. The director of the programme was removed, the largesse spread and the programme continued.

Congress had also joined the action and passed a High-Performance Computing Act in 1991, raising the budget (including software and computer networking) by 68 per cent to \$38m over five years. The act co-ordinates 10 agencies, including DARPA - now renamed ARPA to emphasise its refocus on a dual-use technology role - in a programme that disbursed \$796m in fiscal 1993 on R&D in high-performance computing.

By the summer of 1993 it had funded 30 significant systems, this time including each of the leading companies in the industry. No foreign-owned suppliers were included, hardly surprising since any contract that does not comply with the Buy America Act must be reported to Congress.

Where high-performance computing goes today, so commercial computing goes tomorrow. In July, a Congressional committee lifted the sum by a further \$200m a year and widened the scope to include commercial applications.

Policymakers in Brussels are well aware that the issue matters. One Commission official has estimated that Brussels allocates \$15m a year on activities comparable to those on which the US spends \$796m.

In 1991, Brussels produced a discussion document on IT. This stressed the "enabling" nature of these IT industries, now involved in virtually all economic activities, and their external impact on the EC economies as a whole, already representing 5 per cent of GDP directly and set to approach 10 per cent by 2000.

The role of parallel processing in computing was recognised as an opportunity to improve Europe's status quo. But the EC also noted that European purchasers of advanced computer systems tend to turn to US suppliers which, thanks to their government's intervention, are larger and have more users than their European counterparts.

The latest example was announced last Friday, when it was revealed the European Centre for Medium Range Weather Forecasts was acquiring the Cray Research T3D parallel system - without even going out to tender.

As Paris and Brussels wrestle with Groupe Bull, therefore, the sound and fury will signify little unless some thought is spared for the consequences of the next generation of computing being abandoned to the US.

David Alden is chairman of Meiko, the British-owned high-performance computing company.

BUSINESS AND THE LAW

Pop stars' rights safeguarded

Community rules prohibiting discrimination on grounds of nationality apply to intellectual property rights, according to a judgment handed by the European Court of Justice.

Justice in two cases involving British pop singers Phil Collins and Cliff Richard.

The cases, which were heard together, were both referred from German courts on the issue of the compatibility of certain provisions of German copyright law with European Community law. The domestic provisions in question gave protection against unlicensed distribution of the work, including performance, of any German artist. The protection of performance work was guaranteed irrespective of the place of the performance. However, protection of performance work for non-German artists was limited to those performances on German territory.

Mr Collins's case concerned the recording without his consent of a concert in the US in 1985. Mr Collins sought to have the distribution of the "bootleg" record in Germany stopped.

Mr Richard's case related to the sale in Germany of some of his work performed in the UK between 1988 and 1989. The German exclusive distributor brought an action in Germany against the defendant company, which allegedly had distributed records containing some of the relevant performance work in breach of the former's exclusive rights.

In both cases, the question of the compatibility of the German legislation with EC law arose, and was referred to the European Court of Justice.

The Court first dealt with the issue of whether the provisions of the Rome Treaty which prohibit discrimination on grounds of nationality applied to copyright and related rights. It found that copyright included economic rights, notably the right to exploit commercially the marketing of the protected work, particularly in the form of licences granted in return for the payment of royalties. The exploitation of a copyright therefore could constitute both a source of remuneration for the owner and a form of marketing control.

It followed that, as with other industrial or commercial property rights, copyright was capable of affecting the flow of goods and services as well as competition within the Community. It was for this reason that the Court had previously held that such rights, although determined by national provisions, were nonetheless bound by the Rome Treaty provisions. Given this, copyright and neighbouring rights were thus bound by, *inter alia*, the prohibition against discrimination on grounds of nationality contained in the Rome Treaty.

The Court then dealt with the issue of whether provisions such as those contained in German law were contrary to the Rome Treaty provisions on non-discrimination. The argument raised by the defendant parties was that discrimination between German and non-German artists was justified by the differences which existed between the national law of member states, and by the fact that not all states had adhered to the 1958 Rome convention which protected the rights of performing artists.

The Court reiterated that the Rome Treaty provisions on non-discrimination were not concerned with those disparities in treatment or distortions that arose from divergences between the laws of member states, so long as these differences affected all persons subject to them in accordance with objective criteria and without regard to nationality. This was not the case here.

The Rome Treaty provisions required that persons in a situation governed by EC law should be placed on an equal footing with nationals of the member state in question. The principle of non-discrimination therefore precluded a state from making the grant of a right subject to the condition of being a national of that state.

The Court finally held that the Rome Treaty provisions on non-discrimination were of direct effect and could thus be invoked before the national courts in cases such as these.

Joined cases C-92/92 and C-329/92: Phil Collins v. Intratel Handels-gesellschaft mbH, Patricia Leanderson v. Verleihungsgesellschaft mbH, EMT Electrola GmbH, ECJ FC October 20 1993.

BRICK COURT CHAMBERS, BRUSSELS

An end to the battle of forms

A H Hermann examines a set of terms to help standardise domestic and international trade contracts

When businesses enter into contracts for the supply of goods, there are two dangers to avoid: either too little legal input, or too much of it and of the wrong type.

The first danger looms whenever the deal is made by word of mouth or by a short letter, such as "Ship 100 units as last time". If it comes to a dispute, it will be a veritable feast for lawyers, particularly when the contract is governed by a non-codified law, such as English law.

The second danger, too much law of the wrong type, takes two forms.

One is an antique, standard contract of the respective market, such as the charter party, about which the courts have been complaining in vain for 100 years, to which shipping lawyers retort: "What would we do if it was all clear and certain?"

The second form of too much law of the wrong type appears in the small print on the back of the form used by the other party for ordering goods or confirming orders.

These sale or purchase "conditions", often long and drafted in legalese which few businessmen have the patience to read, can sometimes be summed up in one sentence: "We have all the rights and you have none."

A particularly nasty mess results if both parties use their own pre-printed forms, one for the order, the other for its confirmation.

This can lead to a "battle of forms", and when the forms differ substantially, the court may find that there is no contract at all.

A set of International Trade Terms (Intraterms), produced at the Centre for Commercial Law Studies of the Queen Mary and Westfield College in the University of London, aims at avoiding, or at least substantially reducing these dangers as well as some new ones resulting from the adoption by 84 countries, including the UK's main trading partners, of the UN Convention on Contracts for the International Sale of Goods (Vienna Convention).

The Intraterms are designed primarily for application by reference to contracts for international sale of goods. Intraterms are equally suitable for domestic contracts with the exception of consumer sales.

If used by both contracting parties, they can form the basis of a continuous trading relationship where individual deals are concluded over the telephone or by a short letter.

Alternatively, they can be used selectively, for drafting a contract with the help of computer software supplied with the book which also contains a running commentary relating the terms to the national laws of the main trading



nations and to the Vienna Convention.

The Intraterms incorporate into a contract many of the improvements to English law which have been for some time advocated by English judges or academic lawyers.

In the first place, they require interpretation and performance according to the principle of "good faith and fair dealing", which in its generalised form is absent from English commercial law, but which, nonetheless, English commercial judges try to substitute by a variety of devices.

That they do not always succeed is evidenced by the many judgments introduced with the ominous phrase: "With the greatest regret, I must hold that..."

While English courts are only slowly moving away from the "parole rule" which excluded evidence of statements not contained in the written document, the Intra-

LEGAL BRIEFS

that in such cases the discharge of the contract occurs not by an act of the parties but by the operation of law.

By contrast, Intraterms do not rely on an automatic operation of the law, but give the parties the possibility of discharging the contract by a notice if its purpose can no longer be achieved.

The inclusion in the Intraterms of clearly defined rules concerning *force majeure* is of particular importance because such rules do not exist in English commercial law. Moreover, the Intraterms also provide detailed rules for a fair apportioning of loss caused by frustration of the contract or *force majeure*.

No less important are rules assuring the survival of contracts which provide that "price is to be agreed" and rules protecting the debtor who made an agreed part payment in full settlement from further claims.

Both parties are assured contractual interest on overdue debts and the buyer is protected against the consequences of the House of Lords 1982 decision in "The Chikuma" case where it was held that payment made on the agreed day to the creditor's bank was not made on time if the bank credited it, according to continental custom, with "value next morning".

The Intraterms are also aimed at protecting the seller against the anticipated insolvency of the buyer - an issue which, according to the law lord, Lord Mustill, has been exposed to almost every conceivable error by the courts and for which there are no generally accepted principles for the courts to follow.

Other controversial or unclear issues with which the Intraterms deal are fundamental breach, re-sale of title, passage of risk and claims against the carrier, the merchantability and fitness for purpose of goods, indirect damages, and buyers lien in prepaid but rejected goods.

The chapter on resolution of disputes provides for alternative dispute resolution (ADR) and more flexible, faster and cheaper arbitration, in line with the thinking of the Department of Trade and Industry committee now considering this subject.

International Trade Terms by A H Hermann, published by Graham & Trotman jointly with the Centre for Commercial Law Studies of the Queen Mary and Westfield College. Publishers: Kluwer Academic Publishers, Dordrecht, Netherlands, or the US office in Hingham, MA, (201) 855-1177 (157 pages, HB with diskette £53, \$90 or £1165).



Mediation on offer in housing disputes

Britain's 1.8m registered housing association tenants are to be offered mediation as an alternative to litigation when in disputes with their landlords.

This follows an agreement between the new ombudsman service established by the Housing Corporation, and IDR Europe, a mediation group. The Housing Corporation is a public body set up to distribute government grants to, and to regulate, housing associations in the UK.

This is the first time a public body has signed a formal contract to use alternative dispute resolution rather than resorting to the courts. It is a big step forward for the use of alternative dispute resolution in the UK.

IDR, with more than 120 trained mediators, will be called in to resolve disputes between landlord and tenant in cases where the ombudsman feels mediation is more suitable than court action.

Legal salaries

Salaries for lawyers working in commerce, finance and industry rose by an average of 5.8 per cent over the past 12 months, according to a salary survey of lawyers in industry published by Chambers and Partners, recruitment consultants.

The highest average earnings were for the top 10 per cent of senior legal advisers aged 45 and over, at £170,189. The lowest, for the bottom 10 per cent of legal assistants aged 25-29 years, was £23,750.

Chambers says recession appears to have hit the banking sector particularly hard. Lawyers in banking were the second highest paid group in 1992, but ranked only eighth in 1993. Lawyers in the entertainment industry were the highest paid in 1993, with an average salary of £64,820.

MANAGEMENT: THE GROWING BUSINESS

When cash is a factor

Factoring and invoice discounting, both ways of raising cash against a business's invoices, have increased in popularity in recent years as companies have realised the limitations of the overdraft.

A factor will take over the administration of his client's sales ledger, provide credit protection and advance cash against invoices. An invoice discounting only provides cash.

But how does a company choose a factor?

Cash Flow Solutions, a consultancy, makes the following suggestions:

● Check the financial strength of the factor and find out who are the backers.

● The large bank-owned factors are all members of the Association of British Factors and Discounters but there are many sound factors outside the association.

● Obtain the names of one or two of the factor's clients in your industry sector and ask them about the speed of service provided. How quickly are requests for increases in credit lines met? How helpful are the staff? Could the factor provide an export service if you started selling overseas and does he have an invoice discounting service if you outgrow factoring?

● How generous will the factor be in providing funds against invoices? One company was offered pre-payments of 33 per cent and 65 per cent by two different factoring companies. Are the credit limits offered by the factor adequate for your business and your customers?

● Check which fees the factor will charge. Is there a cost for transferring funds in addition to the administration fee? Are there any arrangement, commitment or renewal fees?

● Choose a factor which is within easy travelling distance. Although most contact will be by telephone or computer link-up, it helps to maintain personal contact.

● What happens if you want to end your agreement? The notice period required varies. Some agreements only allow notice to be given on the anniversary of the agreement; others permit termination within three months of written notice.

*Tel. 0273 692567.

CB

Six in ten of the businesses which started up in 1987, the year I began writing about small firms, will have shut down by now.

By no means all will have "failed", in the sense of going bust. Many will have been closed down by their owners for a variety of personal and business reasons; others will have merged or been taken over. But only 40 per cent will be trading in a form that would be recognisable to the outsider present at their birth.

Life for the individual business owner may be tough and full of uncertainty but the past decade has been one of improvement for the small business sector as a whole. Its contribution to the economy is now much more widely recognised. Small and medium-sized businesses, employing up to 500 people, account for 99 per cent of all businesses in the European Community and 72 per cent of jobs.

In the UK, schoolchildren are encouraged to run their own businesses, while graduates spend their long vacations gaining job experience in small firms in Europe and the US. MBA students flock to optional courses on managing the small business.

Television programmes focusing on the activities of small companies have become popular with viewers, while regional development organisations, which once concentrated on attracting inward investment by large multi-national corporations, now regard encouraging local enterprise as an important part of their role.

In spite of the greater recognition small firms have won, surprising gaps still remain. The family firm still does not enjoy the same prestige in Britain as it does in continental Europe. The relative sophistication of the public stock market and the corporate finance sector in the UK make it attractive for growing companies to sell out or float. Not that the public stock market is necessarily always welcoming to the new entrant. My first article on the Small Business page appeared in January 1987 and discussed the previous day's launch of the Third Market.

This market, intended as a home for dealings in the shares of young unproven companies, has long since disappeared and even the Unlisted Securities Market, whose success prompted the creation of the Third Market, is now under threat. The problems small businesses have in raising capital have remained a constant theme over the past seven years although the public debate goes back at least to the 1930s.

It is unlikely that the debate about the "equity gap" will ever be resolved. Funds will never be available in the quantities demanded by

Charles Batchelor, who leaves the growing business page today, looks back on the past seven years

Two moves on — one back



the ambitious entrepreneur. This is not to say that the methods by which banks assess risk and the criteria which venture capitalists set for backing business should not be subject to regular review.

Both the banks and the venture capital industry have had their reputations tarnished in the past few years. Even at the height of the venture capital boom, in the late 1980s, concerns were being expressed at the venture capital industry's shift away from backing start-ups and early-stage companies.

The banks, too, have had to respond to increasing criticism that in the good times they lend too much and in the bad times too little. It is by no means clear that the banks, large organisations with centralised management structures, will be any more responsive to the needs of small firms during the next boom and bust cycle.

Finance is a perennial problem for small businesses, but other issues have come to prominence or faded in significance over the past seven years. In the mid-1980s the

shortage of suitable premises was still a constraint on the expansion of small firms. The launch of short-lease "managed workshops", with shared reception facilities, and the impact of the recession on the commercial property market have changed all that.

But other challenges have emerged. Quality, specifically the quality management scheme defined under British Standard 5750, has become an important issue. Some small firms claim the standard is unduly bureaucratic while others have adopted it grudgingly under pressure from their customers.

The problems caused by the late payment of debt have become particularly pressing during the recession and its aftermath.

The need to reduce red tape has increased as European Community directives have been heaped on domestic legislation and hopes are currently centred on a new deregulation initiative launched with the backing of the prime minister, John Major.

In the early stages of small firms' rediscovery they were put in something of a ghetto. Much of the early press coverage portrayed them as quirky, quixotic ventures frequently engaged in homely, non-industrial pursuits.

A more realistic view has come to prevail in recent years and they are now seen as part of a broader economic picture. The FT's Management Page reflected this evolving perception by dropping the Small Business title in favour of Growing Business in January 1989.

In the 1980s there was also a growing awareness that maybe the problem was not so much in getting small businesses started — Britain had become rather good at this — but in helping them to grow. The independent, medium-sized company, a key element in German, French and Italian economies, is under-represented in the UK.

The government came to realise that backing more established companies made sense. They had survived the early, vulnerable stages and were less likely to go bust after

public money had been spent on them.

But the government's record at helping small businesses can at best be described as mixed. Although an attempt is now being made to rationalise the network of small business support agencies by setting up one-stop advice shops, known as "business links", small firms remain confused by the plethora of public-sector schemes.

The creation of a network of Training and Enterprise Councils has allowed support to be tailored to local needs. But it has also destroyed valuable schemes such as the Small Firms Service, which provided a nationwide service of information and counselling.

The government, under pressure to "do something" for small firms, has been unable to resist meddling. The Enterprise Initiative, an extremely successful government scheme which was extensively and expensively promoted, is to be modified and handed over to the Tecs. In preparation for this, funding has been reduced.

At the European level, the directorate general established to look after small and medium-sized enterprises, DG23, resisted the threat of merger with other directorates earlier this year. DG23 has had only limited success in representing smaller firms but it does have a distinctive voice in the sector.

But how important is the small business sector to government? In the UK, small firms ministers have changed with bewildering speed. Lord Strathclyde, appointed last month, is the sixth in seven years. None has had the time or the funding to make much of a mark. Fortunately for the small business community, the present trade and industry secretary, Michael Heseltine, takes a strong interest in small firms issues.

But the decisions which really affect small firms are taken in the Treasury, the Inland Revenue and Customs and Excise, all of which have other priorities. Small business lobbyists believe that it is these departments which have yet to be made fully aware of the impact of their decisions on small firms.

My seven years spent covering the small and growing business sector coincided with a government which adopted among its aims the creation of an "enterprise culture". The recession carried away many of those hopes and many of the businesses themselves. Ensuring that business legislation, both new and existing, takes account of the needs of small firms remains an unfinished task for government.

Small firms have been the only creators of new jobs in Europe and the US in recent years and are likely to remain so for the foreseeable future.



Avoiding the trap of software piracy

Software piracy, the unauthorised use of computer programmes, is on the increase, but so is the rate of successful prosecutions. The Federation of Software Theft (Fast) says it took proceedings against 200 UK companies last year and claims not to have lost a case.

Several free, one-day seminars to help small businesses avoid trouble has been arranged by Barclays Computer Operations and Deverill Computers and Communications. They will be held in Southampton, on October 27, Basingstoke, November 4 and Maidenhead, November 11.

Contact Joanne Fendley, Freephone 0800 331062.

Essex helps firms to go Dutch

Essex-based businesses should find it easier to trade with the Netherlands following the creation of a Dutch Desk by Essex Training and Enterprise Council. The desk will provide services such as establishing contact with Dutch companies. Some services will be free, others offered at a discount to the commercial rate.

Contact Essex T&EC, Redwing House, Hedgrows Business Park, Colchester Road, Chelmsford, CM2 5PB. Tel. 0245 450123.

Key employees miss out on insurance

Small businesses are more likely to insure their furniture than their key members of staff, according to a survey by Legal & General Insurance group.

A survey of 840 directors and managers from small firms revealed the loss of a key person would cost, on average, £40,000 in the first year. L&G estimates there are about 175,000 small, limited companies with an uninsured key person. Key protection cover is a form of short-term life or health insurance.

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LEGAL NOTICE

PEOPLE

Rapid elevation for Watson at Olivetti in the UK

Alan Watson's move to the top slot at Olivetti UK was sudden even by the computer industry's standards. Late in September he was still general manager of the company's customer support group, a position he had held since 1986. Two weeks later he had been elevated to control of the whole of the UK operations as Paulo Tosi, managing director for the past eight years, dashed back to Italy to take responsibility for Olivetti Systems worldwide, though he remains chairman of the UK operation.

Watson, now 52, says the succession had been planned for some months but the timing had taken everybody by surprise. These are unpredictable times at Olivetti, however, as Europe's second largest computer-maker struggles with floods of red ink and ever fiercer competition. Watson's



Alan Watson, managing director of Olivetti UK, is seen here.

first job will be to deal with the complexities of the annual budget-making process - a baptism of fire for a new chief executive.

Olivetti UK, however, is not in immediate need of succour. Indeed, it is a shining light in the Milanese gloaming. Under Tosi, it improved its market share and increased its reve-

nues. Watson, as head of the fastest growing segment of the company, played a major role in Olivetti's advance. The group is now second only to Granada Computer Services as a supplier of third party maintenance services.

Watson trained as an engineer in south London and spent some time with Gillette Industries before joining the then British Olivetti in 1967 as a management trainee. He has held a number of positions in the UK company and spent seven years based in Copenhagen running the engineering activities of Olivetti Scandinavia.

He does not envisage making radical changes at Olivetti but argues: "We can do a lot more with our present resources," and has his eyes set on an award from the European Quality Foundation.

Movements in the beerage

David Moffatt, finance director of Hanson Amalgamated Industries, has been appointed group finance director of Hoskins Brewery, the Leicester-based real ale brewer.

The move underlines the acquisitive ambitions of Howard Hodgson, the entrepreneur who became Hoskins' largest shareholder and chief executive two months ago. Hodgson, who bought a 9.6 per cent stake in Hoskins from Barrie Hoar, the company's former chairman, said in August that he planned to embark on a series of acquisitions to expand into associated business areas. He used such tactics during the 1980s to expand his family firm of funeral directors into the UK's largest quoted funeral services company.

Moffatt, 41, has worked for Hanson for the past seven years, having been employed previously by Imperial Group which Hanson acquired in 1986. According to Hodgson, Moffatt's "experience, particularly in the field of acquisitions and operational control, will complement that of the rest of the Hoskins board".

David Richardson, who for the past two years has played a key role in the development of Whitbread's restaurant and leisure division, has been appointed group strategic planning director.

He will "work with the board of directors to continue to refine the strategic direction of the company," says Peter Jarvis, group chief executive. Richardson, 42, qualified as a chartered accountant with Touche Ross, and spent eight years with the firm before joining ICL as a management accountant.

He moved to Whitbread in 1983 and held a number of finance positions within the group before becoming planning director of the restaurant and leisure division in 1991.

Peter Gibbs, executive chairman of GIBBS MEW since 1987, died on October 22 at the age of 71. Tom Henderson, who was a director of J.A. Devenish before joining Gibbs Mew in 1992, has been appointed non-executive chairman.

WASTE MANAGEMENT

International, the rapidly expanding environmental services group, has appointed Humphrey Claxton to the new position of managing director in charge of the water department of its services subsidiary.

Waste Management, which is the UK-listed arm of WMX Technologies of the US, says the appointment will enable it to offer a full range of environmental services to industrial and municipal customers.

Claxton, 47, a chartered engineer with an MBA from Cranfield, has considerable international experience in this field, most recently as managing director of Costain Environmental Services and earlier with Portals Water Treatment.

Although Waste Management already provides water treatment services in a number of countries, Claxton's appointment is designed to provide co-ordination and leadership.

The group's newly formed water department "will be working on a number of big projects worldwide," says Edwin Falkman, chief executive. "These include expanding activities in those countries where we have a water business, such as Italy and the Netherlands, but more importantly in those countries where there is a substantial need for our total environmental services package, particularly in Asia."

Non-executive directors

■ Sir Christopher Bland who, as chairman of LWT, benefited substantially from the recent share option package, has resigned from STORHOUSE, he had been on the board for five years and "wanted to do other things", a spokesman said.

■ James Kerr-Muir, finance director of Kingsfisher, and Stuart Wallis, executive director of Bowater, at THE BODDINGTON GROUP, Paul Judge resigns on December 31.

■ Glenn Cooper, formerly deputy chairman and head of corporate finance at Henry Ansbacher, at PROSPECT INDUSTRIES.

■ John Lusher, recently retired from the main board of Marks & Spencer, at LISTER & CO.

■ Hill Goodall, chairman of Scapa Group, Volex and Hopkins, at MANWEB.

■ David Roberts, deputy group managing director at W.H. Smith, at NPL.

■ Rodney Cullen, former chairman and group chief executive of Standard Chartered, at CATER ALLEN HOLDINGS.

■ David Heywood, formerly deputy chairman at BAT, as chairman at REMPLY on the retirement of Sir Ivor Cohen.

■ Bryan Bigby, former md at BASE, at MEDIVA.

■ Robin Gurney, chief executive of BP Nutrition, at ANGLIAN WATER.

■ Tom Booth, chairman of Refuge Group and a former regional chairman of the CBI north west, at J.N. NICHOLS (VIMTO).

■ Richard Heseltine, finance director of Croda International at OVERSEAS INVESTMENT TRUST.

■ Leonard Rose as chairman at WHOLESALE FITTINGS when he and the current chairman Dennis Rose retire from executive duties on April 30 1994.

■ Anthony Charlwell has resigned from UNITED BREWERIES.

■ Lord Tom Chandon (below), former corporate finance media sector specialist at Kleinwort Benson, at LOPEX.



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LTA will be established as a subsidiary company, LTA Advertising Limited, within London Transport and this company will be offered for sale. The sale offers potential purchasers a unique opportunity to acquire an organisation with fixed term contracts with London Underground, London Buses, Victoria Coach Station, London Transport's Bus Passenger Infrastructure Department and Docklands Light Railway.

Interested parties who require further information should contact KPMG Corporate Finance at the address below:

KPMG Corporate Finance, 3 Salisbury Square, London EC4Y 8BB.
Tel: 071 236 8000. Fax: 071 832 8252.

Contact: John Griffith-Jones, Frank Carter or David Byrne.

The contents of this statement have been approved for the purposes of Section 57 of the Financial Services Act 1986 by KPMG Corporate Finance. KPMG Corporate Finance is a practising name of KPMG Peat Marwick which is authorised by the Institute of Chartered Accountants in England and Wales to carry on investment business.

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BUSINESSES FOR SALE



EniRisorse

Proposed Sale of Eurosic S.p.A.

EniRisorse S.p.A., a Company of the ENI Group with registered office in Rome, Piazza L. Cerva 7, and a fully paid-up share capital of Italian lire 201,392,000,000, registration no. 7456/92 at the Rome registry of companies, invites submission of offers for the purchase of 100% of the shares of its fully owned subsidiary Eurosic S.p.A.

The activity of Eurosic consists in the processing of silicon carbide rock for the production of grits and micro-grits to be used in the sectors of synthetics, abrasives and refractory products with total sales of about 16 billion Italian lire. The Company has its registered office and plant in Scurelle Valsugana, Province of Trento, and it is connected with the highway (Brennero-Verona) as well as the railway networks. The Plant covers 73,000 sq.m, 20,000 of which is built, and is endowed with adequate industrial services, including natural gas.

EniRisorse has appointed Ernst & Young Corporate Finance for assistance in the present transaction. Inquiries may be addressed to:

ERNST & YOUNG CORPORATE FINANCE
Via del Pozzetto, 105
00187 ROME (Italy)
attn: Mr. Stefano Romiti
tel. +39/6/69922725/6; fax +39/6/6780838

Interested companies should request in writing (fax accepted) from Ernst & Young Corporate Finance a copy of the Information Memorandum.

The Information Memorandum will be sent to companies, the legal representative of which will sign, authenticate and return to Ernst & Young Corporate Finance no later than 12th November 1993, a confidentiality agreement, a copy of the financial statements for the last three years, a description of their business and an indication of the reasons for the present investment. Intermediaries of whatever kind shall disclose the identity of the party they represent.

The present announcement is an invitation to bid and it does not represent a public offering ex Art. 1336 of the Italian Civil Code nor a solicitation to public saving ex Art. 1/18 of Italian Law 216/1974. Neither the present invitation nor the receipt of an offer will create any obligation of commitment by EniRisorse to sell to any bidder nor give any bidder the right to require any performance on the part of EniRisorse for any reason, including payment of brokerage fees or consulting costs.

The present invitation and the sales procedure are subject to the laws of Italy.

BUSINESS FOR SALE

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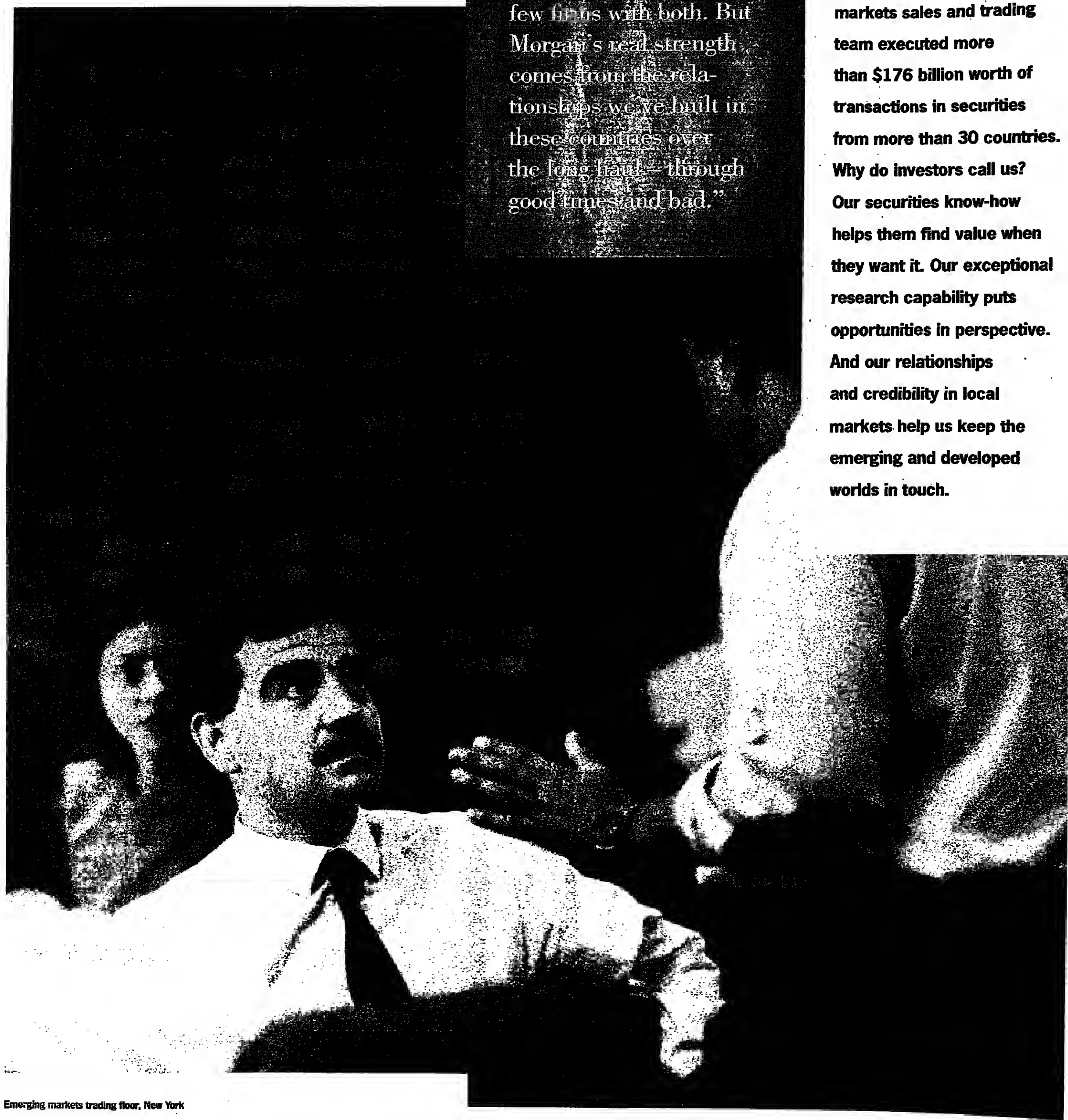
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ARTS
GUIDE

AMSTERDAM

مكتبة الامم المتحدة

Royal Ballet/Clement Crisp

Marching to a different drummer

It is difficult to know what to make of the programme with which the Royal Ballet opened its Saturday night. Advertised as "White and Different" - a catch-phrase which makes no sense - it offers new works by apprentice choreographers Matthew Hart and William Tuckett, a third-hand exercise in kick-boxing by William Forsythe, and a revival of Kenneth MacMillan's "Different Drummer".

Were this ill-formed bill the precursor of a season of novelties, of fresh thinking, it might be seen as an artistic card held in reserve. Not so. The Royal Ballet promises the return of last season's turkeys: the leaden "Don Quixote", Glan Tetley's turgid "La Ronde", the traducing of Ashton's film choreography for "Beatrice Potter" - and such rarities as "Cinderella", "The Nutcracker", "Romeo and Juliet".

Our national ballet has a duty to find its choreographers, and the evening acknowledges that fact. I doubt if the grand arena of Covent Garden is the place in which they should first seek to prove themselves. Matthew Hart, while still a student, made dances of promise. He is young - only two years in the company - and he has created one professional work with Birmingham Royal Ballet.

For "Fanfare", his Opera House debut, he has been given a new score by Brian Elias and design by Yolanda Sonnabend. Wisely, he has opted for a small cast of three couples, and sought to expose something of their physical identities in a series of entries which have an ambiguous emotional air. Yet he has not really mastered his score, which is bold, clangorous with bells, richly varied in texture; nor his designs, which are opt-

lently coloured gaudes and rather too exotic for the dance. That Hart has talent, I do not doubt. Invention is fluent, and he moves his cast easily about the stage, though inconclusive hints of drama are more a tease than a flavour. But he needs experience on smaller stages, under less tremendous circumstances. Had I a wish for him, it is that he join the Birmingham troupe, and make a succession of ballets there - learning, creating, over a period of years, just as MacMillan, Cranko, and Birtley got to grips with their craft. Hart is too valuable to be sacrificed to the exigencies and tensions of Covent Garden before he has proved his metier.

William Tuckett's "If this is still a Problem" is its own problem. Tuckett - as we have seen in ballets made for Birmingham and at Covent Garden - is concerned with dance as exploration of emotional states. His pieces are patently sincere, but they come burdened with too many private messages, and not enough technical mastery. It was less than wise to impose his danced anxieties on the perfection of Ravel's piano trio. Twelve dancers, looking confused and at least than their best, drifted and rushed through the knee-high "angst", the girls in pallid long frocks and bathing caps, the men in basic tights. And Tuckett's design appeared a bland variation on his "Gloria" setting. There were frantic moments when I feared we might be trapped in a "buddy ballet" - chap to chap, as it were. Nothing happened. Tuckett can do better than this, and the Royal Ballet should concern itself with guiding him.

About "Herman Schmerman", the Forsythe acquisition, I report that it was first staged for New York City Ballet in 1982, then mounted in Frankfurt on Forsythe's



Partnering as sparring: Adam Cooper and Sylvie Guillem

troupe. The accompaniment is, unsurprisingly, more bombastic from Thom Willens' central heating system. The first part comprises exercises for three girls and two men; the second part is an aching duet for Sylvie Guillem and Adam Cooper. The opening is unimpressive. The cast build brief, awkward blocks of classical steps, then loose away like athletes after a race. The text is fragmented, with movement given the occasional vicious kick - something from "Mugging for beginners". It is dull, disjointed stuff, where quick, distorting shafts of energy do the work of dance invention. The lovely girls, bare-legged and lit from above, are turned into advertisements for cellulite.

The duet for Guillem and Cooper is more interesting. It proposes partnering as sparring, feeding upon Guillem's extraordinary looseness at the hip, so that steps rotate and reverse and turn in upon themselves. Cooper, dancing and projecting a character with fine assurance, is her match. It is unremitting - albeit given savour by Guillem's extraordinary physique and Cooper's tough response to her - and arid, because mechanistic. With lesser artists it would be unbearable.

The revival of "Different Drummer" makes the evening worthwhile. MacMillan's exposure of Woyzeck's soul was created a decade ago, its return, in the version he revised for the Berlin Ballet, reasserts the piece's importance as a brave expressionistic study. With Irek Mukhamedov as Woyzeck, the title role receives ideal interpretation. Here is Buchner's dumb-ox hero, brutalised, exploited, maddened. And, as Mukhamedov shows us, almost holy in his innocence. It is a frighteningly true, heart-tearing (and technically staggering) portrayal by a great dancer. The other players - David Drew as the Captain, Adam Cooper as the Drum Major, Luke Heydon as Andre, Iain Webb as the doctor - are very fine. I thought Viviana Durante's Marie something too conscious - even too intelligent - though the role is excellently danced. The ballet is searing. Mukhamedov must be seen in it.

Royal Opera House, October 26, 27, November 10, 16, 24, December 2.

Art/William Packer

Waiting for the final resolution in residence

Of all our larger public institutions, the National Gallery was the first, some 15 years ago, to make a studio available on the premises and to invite a particular artist to take up residence. The scheme excited controversy at the time, though quite why seems hard to fathom now. What did mere artists, those rude mechanicals, have to do with the old masters, that they should have such privileged access to the collections?

In practice it proved itself almost at once. Artists have always plundered the art of the past for their own reasons. In introducing the current show of the works of Ken Kiff, the latest to emerge from the scheme, the director of the National Gallery, Neil MacGregor, admits as much: "They have a double power. They are the exploration of an autonomous vision, entire in itself. But... they are at the same time a revisiting of a painted world which I thought I knew and which I now see to be even richer than I had guessed."

But the scheme has changed its spots over the years. So rich and yet so various is the feast afforded by the collections that a certain maturity is required to digest it. From being an annual residency open to competitive application and immediately attractive to younger artists as an early step up in their careers, it has now become a matter of direct appointment as Associate Artist.

Ken Kiff has been thus in post for about 18 months, in which time he has come to work at the studio provided at the National Gallery more or less full-time. He is now 58 and for these dozen years past has been showing his work, on his own and in mixed company, with increasing prominence and regularity. Even so, he is not yet so prominent as all that. In a sense he is still a private artist, a painter's painter, a well-kept secret.

The work is intensely personal, quite as much in its physical and practical aspects, with its saturated colour and impulsive, sensual working of the paint, as in any of its imagery. And that imagery is fraught with reference and symbol, at once overt and yet densely ambiguous and private, funny yet frightening, erotic yet innocent. He knowingly embraces the full scope of the surreal and symbolist tradition at its most sophisticated, from Duccio to Pisanello, Patenier and Bosch, to Goya, Blake and Moreau, to Elton, Miro and Picasso. Yet he remains curiously and touchingly himself.

He has produced a mass of work, much of it unfinished and more to come. The final resolution can wait, for it will come. He has spent much time exploring the collections, from Filippo Lippi and Masaccio to Monet and Van Gogh. But in his work he has naturally been drawn to the masters of magic and miracle, and in particular to the iconography of the Renaissance.

His is the narrative world of the *predella*, the altar-piece and the morality, the lives of the saints, the deaths of the martyrs, the Garden of Eden, the sun flowers in the sky, the snake which slips through the grass, the girl in the pool. And while these things remain unmistakably the product of Kiff's personal vision and elegant hand, we find ourselves, with Neil MacGregor, looking again at Bellini's monks slung over a cross, or Boccaccio's Holy Vision of St. Eustace.

It is to Ken Kiff that we may well ascribe Baudelaire's "impeccable naïveté", the quality that by coincidence is cited as epigraph in the catalogue to the show of recent work by Howard Hodgkin. Many things he may be, and the most knowing and calculating of colourists: but Hodgkin naïveté? Never.

He is an abstract artist in the older and truer sense, moving from particular reference of place or person to its more generalised evocation by association, mood or trick of memory. The achievement is reductive in terms of imagery and the broad simplicity of the final sweeps of paint, cumulative in terms of the actual overlaying of paint. He has a seductive command of his material, most especially so the smaller the scale, to which he brings a visual concentration and intensity.

But now he has begun to move the other way, making paintings that are not exactly vast but are certainly very large for him. And what is lost in concentration is hardly made up by size and weight alone, or at least not yet. The paint seems thinner, the single sweep of the house-painter's brush, that in the smaller works appears so magisterial, seems now stretched, less certain and assured with more space to animate. But then again, it is only the pointless experiment that is ever vitiated by failure. We shall see.

Ken Kiff at the National Gallery, Trafalgar Square SW1, until January 9. Howard Hodgkin, Anthony d'Offay Gallery, Dering Street W1, until November 24.



From Patenier (unfinished): Ken Kiff's highly symbolic piece

Concert/Antony Thornecroft

Old hippie cool

Jackson Browne made a rare visit to London at the weekend: when a man's got a new album to promote, no sacrifice is too great.

In a way he has always been a distant voice rather than a solid body - the voice that spoke for a generation of soulful romantic 1970s students who indulged their broken hearts and painful ideals by listening to his songs of tortured relationships and fractured hopes. No handsome, intelligent, sensitive millionaire can have suffered so much at the hands of women.

For someone roughly handled by fate, and whose body has been rigorously exposed to the Californian drug culture, Browne looks in remarkably good shape: much better than his audience. The lank of bonny brown hair still sets off a sensitive, slightly hungry looking face; the voice remains high and yearning; the band is

as accomplished as only a West Coast folk-rock combo can be. And the new songs, generously, aired at the Cambridge Theatre, London, suggest Browne still has trouble with women, is still searching for personal fulfilment in a better world. But "My problem is you" and "I hear your heart beating everywhere" have a softer, almost Fleetwood Mac-like undertone: it is the laid-back sound of Californian sunshine, the legacy of old hippie cool. Browne is not so pitiful now.

Indeed some of my favourite Browne songs of the past, guaranteed sobbers like "Here come those tears again" and "Fountains of Sorrow", were squeezed out of the programme. This was an up-beat Browne, glad to be here and intent on putting on a professional show for the BBC which was recording the concert. This meant that the tricky vibrato at the end of "Linda

Paloma" had to be repeated to make sure the note was hit. Browne was a bit fussy generally, although he still managed to draw away down conversational side roads.

Browne has promised a quick return visit. It is needed. This was a pleasant evening, but while he may have outgrown some of the great emotional ballads, for his fans the old days were still probably the best days. Some of the memory jokers were performed. "The Pretender" now sounds pretentious but "Before the Deluge" powerfully evokes the fears of those dear dead days, and "Running on Empty" is now a classic rock standard.

No one was better at stretching clever metaphors over long pounding chords to voice the preoccupations of an era. Musically Browne has progressed little: this concert could have been preserved in aspic from two decades ago. But he now enjoys the carapace of a survivor, and he does music.

Concert

Grace and finesse

Peter's Concerto in an unfattering light. He illuminated the solo role with grace and searching finesse, especially in the soberly beautiful two-part writing in his extended cadenza: but what was the orchestra doing? Nothing like enough. The brief moments of vivid exposition got no energetic follow-up. The ruminative first movement, denied the recapitulation it wants, instead declined sideways into a mild Adagio; that, in turn, swung into a pallid "Scottish" rondo with a deflated coda.

Perhaps the RFO had had too little time to find its collective feet with the piece; or again, Davies as conductor may have been too intent upon cultivating his trees at the cost of any wider view of the

woods. The effect, nonetheless, was of a luminous solo voice bobbing over subfusc, under-argued support. It may be relevant that this concerto was a transition, a prelude to Davies's continuing series of "Strathclyde" Concerti for various principals of the Scottish Chamber Orchestra, which are mostly introspective studies. The Violin Concerto may mark an uncertain juncture between Davies' old lust for violent solo expression, and his newer interest in neo-classical form.

In the late 1980s and early 1970s, the time of his neo-expressionist fame, his dramatic progressions were spelt out with lurid clarity. Now, Davies strives after "symphonic development" of a more traditional kind; but his ears remain atonal and serialist, and the old "development" procedures (essentially tonal) do not ring true. We can barely hear them.

Currently he has commissions for two more symphonies. A forceful new approach to large-scale form would be reassuring to hear. We need such a thing and so does Maxwell Davies.

David Murray

ARTS GUIDE

AMSTERDAM

Concertgebouw Tonight, Sun: Ken-Ichiro Kobayashi conducts Netherlands Philharmonic Orchestra in works by Arensky, Tchaikovsky and Rimsky-Korsakov, with cello soloist Peter Wapleway. Tonight (Kleine Zaal): Derek Lee Ragin and friends in Mendelssohn songs. Tomorrow and Thurs: Valery Gergiev conducts Royal Concertgebouw Orchestra in Bartok and Tchaikovsky, with piano soloist Krystian Zimerman. Thurs and Sat (Kleine Zaal): Bartok Quartet. Sat afternoon: Marek Janowski conducts Rotterdam Philharmonic Orchestra in Strauss, Wagner and Schumann. Sat evening, Sun afternoon: Tamas Vassy conducts Netherlands Chamber Orchestra in Mozart, Heppner and Haydn. Sun evening (Kleine Zaal): Combattimento Consort plays baroque concertos (24-hour information service 020-675 4411 ticket reservations 020-671 8345).

Tomorrow: final performance of Orfeo ed Euridice (020-625 5455)

BRUSSELS

CONCERTS Tonight (Conservatoire): Bartok Quartet plays works by Mozart, Schumann and Bartok. Tomorrow (Eglise du Sablon): Bernard Focroulle and René Jacobs in a programme of Monteverdi, Frescobaldi, Couperin and others. Thurs (Eglise du Sablon): Ton Koopman directs European Community Baroque Orchestra. Fri (Palais des Beaux Arts): Adrian Laaper conducts Belgian National Orchestra in an all-Strauss programme. Fri (Eglise des Minimes): Gustav Leonhardt directs Freiburg Baroque Orchestra in Purcell, Bach and Rameau (02-507 8200).

OPERA

The Monnaie has Carmen tonight, Fri and Sun, with eight performances in Nov. Antonio Pappano conducts a new production by Guy Joosten, cast led by Graciela Araya and Richard Margison (02-218 1211). Steve Reich's music-video-theatre piece The Cave, Thurs, Fri, Sat, Sun at Luntheater (02-218 1211).

CHICAGO

CHICAGO SYMPHONY Georg Solti conducts Haydn's The Creation on Fri, Sat and next Tues at Orchestra Hall, with soloists including Ruth Ziesak, Anton

Scharinger and René Pape. Kurt Masur conducts the Leipzig Gewandhaus Orchestra in symphonies by Mendelssohn and Bruckner on Sun (512-435 6888).

CHICAGO LYRIC OPERA

Final performances of Carlisle Floyd's Susannah, starring Renée Fleming and Samuel Ramey are tonight, Fri, next Mon and next Fri. Tooca, with Maria Ewing, Kristian Johansson and James Morris, can be seen tomorrow and Sat, with further performances till Nov 12. Così fan tutte is revived on Nov 6 (512-332 2244).

THE HAGUE

ANDRIESEN FESTIVAL A series of concerts devoted to music of Dutch composer Louis Andriessen (1919-93) this week at various venues in The Hague. More than 20 Andriessen works have been programmed, with music chosen by the composer, and films from documentaries to Tom and Jerry cartoons. The festival reaches its climax on Sat with a concert by the Hague Philharmonic Orchestra under Gerard Schwarz (at Anton Philipszaal) and a new staged version of Andriessen's M is for Man, Music, Mozart (at Visages in Scheveningen). On Sun, the ex-halls of the Theater aan het Spui play host to a simultaneous performance of music, film and video (070-360 9810).

ROTTERDAM

De Doelen Tonight: Gustav

Leonhardt conducts Freiburg Baroque Orchestra in works by Purcell, Bach and Rameau.

VIENNA

WIEN MODERN Vienna's annual contemporary music festival opens tonight at the Konzerthaus with a performance of Bernd Alois Zimmermann's Requiem by the Slovak Philharmonic Orchestra and Chorus conducted by Zoltan Pesko. The other three featured composers this year are Erich Urbanner, Toru Takemitsu and Krzysztof Penderecki, who conducts his St Luke's Passion on Sun morning at the Musikverein. The opening week includes orchestral concerts conducted by Michael Gielen and Peter Eitner. The festival, which runs till Nov 28, also features music by Messiaen, Birtwistle and Mark Anthony Turnage (712 1211).

OTHER EVENTS

Staatstheater Tonight, Thurs and Sat: Zubin Mehta conducts Il trovatore, with alternating casts including Cheryl Studer and Michele Crider as Leonora, Agnes Balza and Stefania Toczyńska as Azucena and

Sergel Leiferkus as Luna. Tomorrow: Il barbiere di Siviglia. Fri: Maria Stuarda. Sun: Lucia di Lammermoor (51444 2955).

MUSIC/DANCE

● Lorin Maazel conducts National Symphony Orchestra in works by Dvorak, Gershwin and Johann Strauss tonight at Kennedy Center Concert Hall. Thurs, Fri, Sat: James Conlon conducts Mozart, Dukas, Britten and Ravel, with clarinet soloist Richard Stoltzman. Sat afternoon: Arun Pizarro piano recital. Nov 3: Maria Janowska conducts St Petersburg Philharmonic Orchestra (202-467 4800).

WASHINGTON

● David Zinnman conducts Baltimore Symphony Orchestra and Chorus in Egmont's The Dream of Gerontius on Thurs and Fri at Baltimore's Joseph Meyerhoff Symphony Hall, with soloists Anne Howells, John Aler and Michael George (410-783 8000).

● Dancers of the Bolshoi Ballet present excerpts from classical ballets tomorrow and Thurs at Center for the Arts, George Mason University. Finches Zukerman gives a violin recital on Fri (703-993 8888).

THEATRE

● Company: the Tony Award-winning musical comedy by Stephen Sondheim and George Furth (Signature Theater 703-820 9771).

ZURICH

Openhouse Tonight: Carlo Franci conducts Meibohm, with a cast led by Simon Estes and Mara Zampieri. Tomorrow, Sat, next Tues and Fri: Nello Santi conducts Jonathan Miller's new production of Falstaff, with Juan Pons and Lucia Popp. Thurs: Rigoletto with Giorgio Zancanaro and Francisco Araza. Fri: Così fan tutte. Sun: Don Carlo with Ferrara Izso d'Amico, Giovanni Casella, Vincenzo La Scala and Wolfgang Brandel (01-282 0808).

ARTS GUIDE

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A few years ago, it was not unusual to spot in Tokyo's rubbish dumps perfectly functioning TV sets or audio equipment, abandoned by their owners to make room for the latest model.

Today, Japan's hard-pressed consumers are loath to throw away anything, let alone buy another electronic gizmo for their small apartments. Yet the worst recession in 20 years is only one of a daunting list of problems facing the country's once world-beating consumer electronics groups.

Most of their main foreign markets are shrinking, at a time when the yen's rise has hit their price competitiveness. The domestic market, once a willing test-bed for new products, is saturated. In addition, the consumer electronics giants are short of the imaginative new gadgets they badly need to ensure future growth.

The impact of such pressures and shortcomings on consumer electronics sales has been considerable. The Japanese market's total turnover has plunged by 23 per cent from a peak of ¥2,150bn in 1988 to ¥1,657bn last year. Last month the mighty Matsushita warned that pre-tax profits for the year would be 36 per cent less than earlier forecast. Today, the company, along with Sharp, is likely to report lower profits for the past six months; Toshiba and Hitachi should be in a similar position on Thursday.

While the problem of product saturation was countered by the rapid rise in consumer spending of the late 1980s, recession has served to reveal the glutted home market. According to the Electronics Industry Association of Japan, 99 per cent of households have at least one colour TV; more than 75 per cent own a video-cassette recorder and 54 per cent, a compact disc player. "The era of continuing expansion is over," mourns Mr Nobuyuki Idei, a director of Sony.

When asset prices, particularly land, collapsed soon after the turn of the decade, the knock-on effect was to make consumers more price-conscious. Consumer electronics companies were jolted by the realisation that they had lost touch with what their customers wanted.

Nothing illustrates the giants' sleepiness more clearly than their failure to spot the emergence of the video games market, where smaller, more entrepreneurial companies, such as Nintendo and Sega, have achieved dominance.

"Before we realised what

Salvage task for metal man

Japan's depressed electronics groups are seeking high-tech saviours, says Michio Nakamoto



was happening," admits Sony's Mr Idei, "the market was dominated by Nintendo and it was very difficult to get in."

Such strategic blindness has proved costly. The Japanese video games market saw sales rise 13.5 per cent last year, while VCR sales fell 12 per cent, according to the Ministry of International Trade and Industry.

Having missed out on the surge in video games, the pressure on consumer electronics groups to find growth areas is intense. Many observers agree that they need to look beyond traditional boundaries. "We cannot rely on consumer electronics alone," says Mr Tsuzo Murase, executive vice-president of Matsushita.

For some, the answer has been to diversify into the entertainment industry. Sony, Matsushita, JVC, the maker of audio and visual equipment, and Toshiba, the broad-based

electronics company, have all bought stakes in US entertainment companies. Matsushita has invested in 3DO, a US start-up company developing a three-dimensional games machine, while JVC has launched a machine with Sega. Another move has been to use digital technology, the basis for modern computing and telecommunications, to open the door to a range of possible new products. Compact discs are one example. Here, the boundaries are being expanded as discs begin to carry video as well as audio entertainment.

The marriage of computer technology and telecommunications could form the foundation for the growth business the consumer electronics industry is seeking. The electronics industry association of Japan estimates that the global market for such "multimedia"

products could eventually be

worth ¥325,000bn a year. "Multimedia will enter the home so consumer electronics companies must participate in the market," says Mr Murase.

But the way forward for digital technology has not yet been mapped out. Exactly how companies will penetrate the home and workplace is a question Mr Murase and his competitors are struggling to answer. "The future of multimedia is not yet clear," he says.

The Japanese industry is still debating whether multimedia will take off as a sophisticated video games machine, a communications tool for business people, or a high-tech TV set that lets viewers communicate with each other.

One snag is that multimedia requires consumer electronics makers to venture into areas where they have little experience. Japan's competitors, particularly computer makers in the US, have greater expertise in digital technology and many have already introduced multimedia computers which can display videos, play music and send faxes. Companies in the US are also ahead of Japanese companies in developing multimedia software. Microsoft, the computer software company, recently launched a line of home business and entertainment programmes under the Microsoft Home brand, which will target the home computer user.

The Japanese have been forced to catch up by linking with US groups. Sony and Matsushita have bought stakes in General Magic, an Apple subsidiary developing communications software, and Matsushita has invested in EO, another embryonic US company which is developing personal digital communicators. "As telecommunications and computers combine, the relationship with the US becomes increasingly important," says Mr Yoichi Morishita, president of Matsushita.

It is clear that Japanese consumer electronics manufacturers will have to rely on the expertise of video games makers, computer companies and software developers in creating the vital partnerships that could herald future growth for the industry. Even with the help of such partners, Matsushita and its rivals will need skills far beyond their traditional business of making electronic boxes.

The test of whether Japanese consumer electronics companies continue to lead the world market into the next century is how they live up to this new and unfamiliar role.

Joe Rogaly

No need to talk to IRA



It can go on like this. The campaign of violence generated by the provisional wing of the IRA nearly a quarter of a century ago may continue for as long again. Sir Patrick Mayhew, the Northern Ireland secretary, said in the Commons on Friday that the price of defending democracy and the rule of law is always high, and always worth paying. "We shall defend them in Northern Ireland, if necessary at infinite length," he insisted.

The thought is almost too awful to contemplate, particularly as we weep for the innocent victims of the Saturday night bombing in the Shankill Road. Surely something can be done?

Not much. Formulas for immediate peace depend on one of two unlikely starting points. First, the IRA provisionals could unilaterally renounce violence. The events of the past few days demonstrate their unwillingness to do so. Alternatively, the British government could offer concessions and negotiations in return for an undertaking to end the carnage. As Sir Patrick intimated again yesterday, there is no question of such a deal.

The courageous Mr John Hume, the Social Democratic and Labour party member for Foyle, will not accept this. He is to be given credit for his motives, even if his hard work does not produce a successful result. He has been talking to Mr Gerry Adams, the leader of the political wing of the IRA. They appear to have been working on a delicate formula. Perhaps we should see the full details before we judge it, but rejection is the likely outcome. Any peace plan that involves formal

negotiations with Mr Adams or Sinn Féin ahead of a complete and unequivocal renunciation of the use of terrorism as a political weapon will fail.

Some will protest that this is too inflexible a posture, that the situation is so horrible that it requires an abandonment of previously entrenched positions. The recent South African and Middle East breakthroughs are seductive examples in support of such an argument. The case does not, however, stand up to examination. It is true that President F.W. de Klerk released Mr Nelson Mandela from prison and negotiated with him, even though the ANC leader refused to dishard his raggle-taggle and pathetically ineffective army. But the IRA cannot rely on this analogy. Irish republicans have the vote, both north and south. Mr Adams even won an election to the Westminster Parliament.

South Africa's blacks could not vote. They have not yet done so. Again, the Israeli government has recognised and dealt with the Palestine Liberation Organisation, after years of swearing that it would not. But its overriding objective is survival. It has always seen its first duty as the defence of Israel's existence against a host of external enemies. At the time of the recent deal it had nowhere else to go. Mr Yasser Arafat, the PLO leader, was likewise in a corner. The other Arab states were not able to represent the Palestinian interest in direct talks with Jerusalem.

Here it is different. Britain is not, and will not be, threatened with obliteration by the IRA provisionals. No external enemies surround us. Sir Patrick looks to constitutional talks to further the peace process. The Anglo-Irish agreement provides for direct conversations between London, Belfast and Dublin: he will pursue those.

Principles apart, there is no need to deal with the provos. Think about it. There is no domestic political reason why the government should conclude a peace agreement with Sinn Féin, let alone with its terrorist counterpart. You might think that after 24 years of violent insurrection there would be a swelling chorus in favour of compromise, of doing a deal of getting out of ceasing hostilities at any price.

There is not. I recall a recent conversation with a senior minister. Our starting point was the catalogue of IRA and "loyalist" violence. Since 1969, no fewer than 3,089 people have been killed by terrorists in Northern Ireland alone.

The British people condemn, but offer no quarter to, the perpetrators of each new outrage

Some 2,156 of these were civilians. These figures include an increasing number of murders by "loyalist" paramilitary organisations. Murders on the British mainland are becoming commonplace. To remind you of just two - in Warrington in March an IRA bomb killed a three-year-old and a 12-year-old. This was part of a seemingly never-ending series of bombings, some for Christmas, some for Easter, some aimed at "economic targets". The City of London has been sealed off since the summer; only yesterday travellers inwards from the west were inconvenienced by bombs at Reading and Basingstoke. Mr Tony Benn, relying on the House of Commons research department, said on Friday that the total cost of the emer-

gency since 1969 was £14.5bn at current prices.

The senior minister pointed out that this unhappy story carries a strange moral, namely that there has been no public demand for a change of government policy. Mr Benn quoted opinion polls that suggest the opposite, but these were even less convincing than usual. The postbags of members of parliament are not stuffed with constituents' letters pleading for a deal with the IRA. The troops-out movement appears to have faded away; yesterday Labour was calling on the government to send more soldiers in. The British people are almost absurdly stoical. They express horror at every new outrage. They condemn, but offer no quarter to, the perpetrators. Each additional incoherence to the travelling or working public is bitterly criticised, but rarely adduced as a reason for changing tack.

In sum, the political tide is against Mr Hume's plan. Mr John Major, who does not enjoy a reputation for firmness, would be greatly damaged were he to "give in to the IRA". That would be seen by the voters as losing a war, something alien to the British psyche. The prime minister is aware of this. He said at the recent Tory conference that "no government which I lead will negotiate with those who perpetrate or... support the use of violence". The Tories have restored their former name - the Conservative and Unionist party - in recognition of the reality that Mr Major's government, which commands a majority of just 17 with Conservatives alone, frequently has to importune nine Ulster Unionists for support. Heaven knows what has been promised in return, but we can be sure that a deal with the provos before they lay down their arms is not part of it.

LETTERS TO THE EDITOR

Number One Southwark Bridge, London SE1 9HL

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At what cost new funds?

From Peter Milne.
Sir, Richard Lapper's piece ("Back from the abyss", October 22) on the arrival of corporate investors at Lloyds gave some useful background for potential new investors to bear in mind. The extent to which the new corporate vehicles will be exposed to past losses seems unclear, which must be a concern. The other fairly big reservation I would have is just how much is going to be extracted in expenses before the investor receives his return.

To the famed rapacity of those at Lloyds, something new has to be added for all those nice merchant banks and brokers, not known for undercharging, who have suddenly become so enthusiastic about the new Lloyds product. No doubt all this will be clearly set out in the prospectuses.

Peter Milne,
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Hertfordshire AL5 5NW

BR privatisation bid essential to send 'message of hope'

From Ms Ruth Evans.

Sir, Your editorial, "Right lines for rail privatisation" (October 22), argues that British Rail should not be allowed to bid against commercial operators to run train services on the grounds that BR could win most of the franchises by cross-subsidising its bids in order to fend off competition.

The National Consumer Council cannot agree with this. If the intention of the government's rail privatisation programme is to lead to improved rail services, then BR must be allowed to bid. This would send a message of hope to the many thousands of disenfranchised rail users up and down the country, by letting them know that the government is serious about achieving this aim. It can only be to the consumer's advantage if BR's services are forced to

meet the rigorous standards of service set down by the new franchise authority.

We can envisage no better discipline for BR than for it to be subject to these controls over fare and service levels. Quite simply, if BR did not provide value for money it would lose the franchise.

The alternative is to leave BR to run the services that nobody else wants to run. Our National Consumer Council's concern is that, all too soon, this could lead to a two-tier rail service, in which BR becomes a provider of last resort, rail fares climb higher still, and rail passengers are the losers.

Ruth Evans,
director,
National Consumer Council,
20 Grosvenor Gardens,
London SW1W 0DH

A test for unit trust managers

From Mr David Landman.

Sir, Lex makes the point that some unit trust managers are against the Securities and Investments Board proposals, because it would be "more difficult for them to make profits by holding units on their own account ready for resale" ("Unit trusts", October 22).

Somewhat similar behaviour by stockbrokers and traders has been punished severely by stock exchanges everywhere.

Could you publish a list of unit trusts which do not engage in this practice and also an interview with a fund manager who does? The interview should give him the opportunity to explain how he keeps the investors' interest paramount, and he may also tell us what happens to the units he has bought when the market takes a sudden fall.

David Landman,
665 Finchley Road,
London NW2 2HN

Falling pound

From Mr John Miles.

Sir, Geoffrey Howe ("The triumph and tragedy of the Thatcher years", 23/24 October) includes as one of Margaret Thatcher's triumphs "the remarkable success we achieved against inflation".

As one who chanced to start to draw a non-inflation-proofed pension in 1979, I have often wondered if the pound has ever lost more of its value under any other prime minister.

John Miles,
31 Oakwood Drive,
Edgware,
Middlesex HA8 5LG

Audi aluminium car a questionable 'Vorsprung'

From Mr Christian Etzel.

Sir, John Griffiths (Technology: "On the road to the future", October 22) portrays the use of aluminium in the manufacture of cars as an innovation. While this is true of the use of a space-frame in a high-volume car, other car makers such as Land Rover and Rolls-Royce have used aluminium for some time.

What has made cars heavy over the years are safety features such as anti-lock brakes, air bags and side-intrusion protection beams, as well as the use of electric motors to power

just about anything that moves, while car bodies have increased comparatively little in weight.

The argument that aluminium bodies will last much longer than their steel counterparts is certainly valid - witness the longevity of Land Rovers - but Audi body shells already outlast the mechanical components. Is Audi addressing a problem that does not really exist? Higher manufacturing costs and presumably a higher purchase price will also affect insurance premiums. A car requiring such complex

production is likely to require complex repairs. Aluminium body panels are usually replaced rather than repaired.

While the ASF Audi is an interesting experiment, it does give the impression that Audi is rather desperate to upstage its technological feats of the 1980s - the low drag Audi 100, the five-cylinder engine and the Quattro - at any cost. But is it a real "Vorsprung" that will put cash in Audi's till? Christian Etzel,
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Hamburg, Germany

Size of UK theatrical business no justification for subsidies

From Mr David Savers.

Sir, Mr Cameron Mackintosh (Personal View, October 14) protests too much about the virtues of subsidies to the arts and the evil effects of their reduction.

The size of the British theatrical business and the revenue earned from subsidised productions are not justifications for subsidy. Every business in Britain could claim that it would perform better if it had more aid from the government; but who would then finance the subsidies? And experience of other industries suggests that subsidies reduce rather than increase efficiency - improvements in which are the source of economic growth.

Any economic benefits from the theatrical business are likely to be local; theatres may attract visitors to one place rather than to another. That is

one reason why I suggest that any subsidies should result from local decisions, not come from central government (Personal View, September 30).

It is not surprising that talented artists and entrepreneurs have gravitated towards the cheapest and most abundant source of funds, the subsidised sector, or that unsubsidised theatre shows productions which have, to varying degrees, had their costs reduced by subsidies. But it is improbable that all the talent in the subsidised sector was drawn to the theatre by subsidies, or that it would leave the theatre if subsidies were withdrawn.

The British theatre managed to attract quite a lot of talent before it first received subsidies in the 1940s, and there is a much richer and better-educated public to support it now.

The present strength of the British theatre must be at least partly attributable to this increasing wealth and sophistication of its audience, which is also the strongest guarantee of its future health. If educational standards and incomes continue to rise, the market for the arts will continue to grow - and the case for national subsidies will become progressively weaker. I believe that the government should promote knowledge of the arts through the educational system, so more people can appreciate them.

It is not just high-profile theatres that attract upper-class audiences, as Mr Mackintosh suggested. A survey of audiences in Glasgow, Merseyside and Ipswich in 1988 found that 73 per cent came from social groups A, B and C1, although they formed

about 33 per cent of the population.

A reduction in subsidies might reduce the profitability of new productions, so their number and cost would be reduced, and producers would seek a larger audience for each play. The earnings of those concerned with production might fall, but their incomes do not deserve tax payer support. Any reduction in choice seems unlikely to reduce the audience significantly, because theatre-goers on average attend only two or three performances a year. Loss of national subsidies should not be the disaster Mr Mackintosh believes.

David Savers,
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Tuesday October 26 1993

France's air of confusion

IN THE overall economic scheme of things, the skirmishing over the future of Air France between the French government, the company's management and its workforce may seem of limited and local significance. Politically, however, it represents a reversal of large and ominous proportions.

By climbing down under union pressure and scrapping the rationalisation plan it had six months ago encouraged Air France management to adopt, the government has not only demolished the position of the chairman, Mr Bernard Attali, it has sent out the clearest possible signal of its own weakness in the face of the multifarious special interests that recession and economic restructuring have brought clamouring to its door. Those of France's European partners who want the Community's industrial structures to continue adapting to competition within and without, rather than retreating behind a wall of subsidy and trade protection, have a right to be concerned.

That would be an excessively harsh judgment to hang on the events of the last two days if the government's handling of Air France were the only sign of its confusion. The trouble is that it is not. Over the Uruguay Round of multilateral trade negotiations, over economic and monetary policy and even potentially over his programme to privatise state-owned industry, Mr Edouard Balladur, the prime minister, looks increasingly adrift in a sea of conflicting pressures and demands.

Hobson's choice

In this he is, of course, not exactly alone. All EC governments are grappling to a greater or lesser extent with problems of rising unemployment, uncompetitive industry, sluggish growth and high public sector deficits. From Wolfsburg to Wolverhampton, companies and their workers are having to look afresh at the structure and costs of labour, and politicians are struggling to redefine the role of the state. In France, however, the difficulties seem especially acute. In part because of the more prominent role the state has traditionally played in the economy, but also in part as a result of Mr Balladur's failure to explain the consequences of his own policies.

Hard choices for defence

THE STRUGGLE between the Ministry of Defence and the Treasury over the size of the British defence budget has become one of the predictable issues in this autumn's public expenditure round. Whatever the short-term outcome of this struggle, the absence of any prospect of war, and the pressure of Britain's public spending problems combine to ensure that the defence budget is bound to seem a tempting source of savings.

Under current plans the UK will spend around 3 per cent of gross domestic product on defence in the late 1990s. This is less than the 5.3 per cent of the mid-1980s, but more than most of Britain's European allies. But the right level cannot be determined simply by this criterion or by comparison with other public spending priorities.

Britain has a relatively impressive military capability and a military record of which it can be proud. But it must now adapt to new circumstances. Armed services have to plan, no longer against a known enemy, but against the unpredictable. Nobody knows what or where the next "threat" will be, its size or direction, or its order of battle. This means the government has more difficult choices than before about the kinds of forces it needs to provide, and where.

Clamorous warnings about the damage further cuts would cause are largely unhelpful. The House of Commons defence committee has warned that military capabilities could fall below the minimum level necessary for national security and that, already, the navy could not protect the nation's sealanes. But there is no conceivable direct outside threat to the UK that would not involve its allies, and few tasks it would want to take on overseas on its own.

Foreign policy

What is needed is a clear foreign policy framework within which Britain's defence commitments can be set. The Ministry of Defence, in its last white paper in July, laid out 50 distinct tasks which the armed forces carried out. The message it wanted to send to the Treasury was, first of all, that the military often fulfil two or more tasks for the price of

On the Gatt, he has himself admitted the Hobson's choice he faces: between the domestic crisis that would result from his accepting the terms likely to be on offer from the EC and France's other trading partners, and the international crisis that would ensue if he refused. But although this is a dilemma in part of his own making, he has barely begun to point a way out of it, or to tell protesting farmers that Gatt or no Gatt, their industry is in secular decline.

Job losses

On monetary policy, the government is still behaving as if the currency crisis of this summer never happened. By failing to take advantage of its new-found freedom to cut interest rates, it is prolonging and deepening the recession and fuelling the clamour against job losses. Over time, this could seriously complicate the privatisation policy that has thus far been the government's one big success, by preventing necessary restructuring at such companies as Groupe Bull and Air France. Instead of decisively reducing public ownership and increasing the ability of French industry to compete in the European market, Mr Balladur may thus find himself endlessly juggling demands for subsidies from badly managed state companies - and coming increasingly into conflict with France's EC partners as a result.

That is why Air France is such an important test case. Until Sunday, the government's restructuring programme was "indispensable" if the airline was to be able to compete with other streamlined carriers in the liberalised EC aviation market. Now it appears to be suggesting that a softer option exists. Worse, Mr Balladur's *volte-face* has merely encouraged public sector unions to try their luck against other tough but necessary management decisions in future.

It is certainly true that decisions of this kind can only be implemented if a political consensus can be mustered behind them. But by giving in on this occasion, the government has not taken a step towards creating such a consensus; it has merely postponed the evil day, and given encouragement to those who urge the EC to turn away from the market.

More selective

Although the forces have undergone substantial cuts and reorganisation under the 1990 Options for Change review, there has been no sacrifice in the range of military capabilities provided. The challenge for military planners is that they will have to be more selective. While it may be possible to absorb some short-term financial cuts through improved efficiency and chieftaincy, there are hard choices that must be faced.

If Britain wants to keep its Royal Marines, for instance, there is little point unless it provides the ships and helicopters they need. But that might have to be at the cost of anti-submarine frigates. Modern attack helicopters might be regarded as a higher priority for the army than tanks. But reducing Britain's armoured presence in Germany could call into question its leadership of Nato's new rapid-reaction corps.

With defence budgets being squeezed throughout the Nato region, the trend must be towards a sharing of responsibilities between European allies. In so far as this makes European defence efforts more effective, it could help to encourage a continued US commitment to the alliance.

In the very short term, the room for manoeuvre is limited. On new equipment projects due for service in the next few years, much of the money has already been spent or committed. The armed forces also have some justification in asking for a breathing space after the upheaval of the reductions which followed Options for Change. But it is not too early for the government to provide a sense of direction, putting defence in the context of a shared European discussion rather than a narrow domestic public expenditure argument.

The government of Mr Edouard Balladur, faced with its first serious industrial dispute since taking office in March, quickly climbed down from the brink.

The withdrawal of Air France's controversial cost-cutting plan on Sunday night was aimed at preventing the escalation of a strike that had paralysed the loss-making airline for the past week. The prospect of today's "Black Tuesday" industrial action, with unions at Air France's domestic subsidiary and the Paris airport authority planning to join forces with striking ground staff, fuelled fears of a winter of public sector discontent. It forced the government to promise that a new recovery package for the airline would be negotiated over the next three months.

The declaration was quickly followed by the resignation of Mr Bernard Attali, the airline's chairman, who had drawn up the plan to cut 4,000 jobs by the end of next year and reduce overtime pay. He had argued that the measures were crucial for the group's survival.

The government's concession on the plan and Mr Attali's departure should help defuse the conflict at the state-owned airline after today's strikes. But Mr Balladur and his colleagues may find the costs greater than the benefits. The problems at the airline are being shelved, not solved. More significantly, the dispute highlights the dilemma facing the Balladur government as it seeks to restructure French industry and privatisise public sector groups, while trying to prevent social unrest in the face of an unemployment rate of 11.7 per cent and rising.

The events at Air France represented the first significant test of how the government would respond to this dilemma. Its reaction is the clearest evidence so far that unemployment and the consequent threat of industrial strife are creating a barrier to reform that the government is unwilling to breach.

This is implicit in the government's justification of its decision. "We cannot save Air France while clashing with all its employees," said Mr Bernard Besson, transport minister. "Because we must have social peace, we must change the plan."

But by backing down in the airline strike and abandoning the cost-cutting plan, the government may find that its hand is weakened in its pursuit of industrial restructuring. The case could encourage other unions to press their causes through industrial action and complicate, rather than ease, the implementation of economic reforms.

Even at Air France, social peace is not guaranteed. While the unions that spearheaded the protests said

they would return to work tomorrow, Air France, which suffered losses of FF3.8bn (244m) in the first half of the year, remains in urgent need of restructuring.

Mr Besson has said that the 4,000 job cuts in Mr Attali's plan are still necessary, although he believes they can be implemented without involuntary redundancies. But delicate negotiations will be required if a repeal of the unrest is to be avoided. Public sector trade unions said yesterday that they were satisfied with what they described as a "first victory", but warned that they would continue to press their case against cuts in pay and overtime rates in negotiations with the transport ministry.

There are grumblings of public sector discontent elsewhere, too. The Confédération Générale du Travail, the left-wing union group which was at the forefront of the Air France dispute, has called for a

A loss of nerve in mid-flight

The French government's climbdown in the Air France strike could prove costly, writes John Ridding

Paris: France's economic balance of payments



Air France's losses in 1992 and 1993. Source: Air France



Air France employees demonstrate at Orly airport, Paris

they would return to work tomorrow, Air France, which suffered losses of FF3.8bn (244m) in the first half of the year, remains in urgent need of restructuring.

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There are grumblings of public sector discontent elsewhere, too. The Confédération Générale du Travail, the left-wing union group which was at the forefront of the Air France dispute, has called for a

day of protest on November 18 against job cuts. This is expected to hit France's railways and several public sector companies, including Aerospatiale, the aerospace group, Snecma, the aero-engine manufacturer, and Groupe Bull, the computer group.

Discontent is also evident in the postal service and at France Telecom. A one-day strike on October 12 drew wide support from workers at these groups, reflecting fears of job cuts and opposition to the government's employment bill. Unions perceive the bill, aimed at increasing the flexibility of labour law, as an attack on their powers.

For the moment, the risk of widespread public sector unrest appears limited, partly because of continuing divisions among different unions. Several union groups, including Force Ouvrière, the radical federation that is prominent in the Air France dispute, have indicated

that they will not participate in the November 18 protests. And at the weekend, the government reached agreement with four public sector unions over pay for civil servants. The deal, which gives civil servants a pay rise of 5 per cent for the next two years, avoids a potentially damaging impasse.

The events at Air France, however, have given France's trade unions a boost. "Yes, it is possible to win," said Force Ouvrière in a statement. "The employees are victorious." Moreover, the rise in unemployment, forecast to exceed 12 per cent by the end of the year, will continue to provide fertile ground for disputes.

But faced with a growing budget deficit - targeted at FF317bn this year - and the need to prepare public sector companies for privatisation, the government urgently needs to improve the efficiency of state-owned industry. It cannot

Feudal system in the sky

Paul Betts and Daniel Green on the obstacles to restructuring and profitability at Air France

other European countries. Luftansa has launched a low-wage cost subsidiary for short-haul routes as part of a programme which includes 8,000 job losses.

BA, too, pays lower wages on its BA regional operation which works out of non-London UK airports. A year ago, it also took over the low-bidder operation of Gatwick-based Dan-Air, and has a stake in budget French carrier, TAT.

This shows up in productivity figures. Between 1988 and last year, Air France's sales per employee rose 12 per cent to 188,000. At Luftansa, the rise was 22 per cent to 173,000; at BA, the increase was 32 per cent to 190,000.

Mr Attali conceded two weeks ago Air France had been slow to address its cost base - one of the heaviest in the industry. The risk was the airline could be behind when its main competitors were already well down the road of restructuring and were showing improvements in profitability.

Even Luftansa of Germany, with its own difficult labour situation, has won important concessions from its union and is showing signs of improvement.

For Air France, the old "fortress France" strategy is beginning to show deep cracks. Government protection has been increasingly

Air France has been run more by civil servants than by professional airline managers

undermined by the global nature of the airline business and the European Commission's resolve to open up European skies and clamp down on state subsidies.

Mr Attali's strategic acquisitions and marketing partnerships have strengthened Air France's international reach. But underlying problems must still be addressed. Apart from entrenched union opposition, it has lacked strong management.

This reflects its political nature. Air France has been run more by civil servants than by professional

airline managers. Mr Attali was no exception. He took over four years ago because he was strongly favoured by the Elysée palace, where his brother, Mr Jacques Attali, had long been a close confidant of President Mitterrand.

Air France has been a feudal barony, with management factions fighting each other, with the sides being decided by political and civil service colours.

Mr Attali accepted the need for change, but attempted a delicate balance between restructuring and maintaining the political consensus to enable him to run the airline.

Market pressures forced him to act vigorously. Indeed, he claimed the government had been closely consulted in his latest restructuring plan and that he had its full backing until a few days ago. The risk now is that, as the rest of the industry starts to recover, Air France will still be shackled by its past and will fail to take advantage of the eventual recovery cycle in the airline industry.

Even if the government is prepared to pay this price, it may find it particularly difficult to contain supporting the airline when state aids are coming under attack from Brussels and other big international carriers are turning themselves into fiercer competitors.

Rebels and heroes

■ Mikhail Poltoranin, head of Russia's Federal Information Service, says he was never in favour of censorship. Yesterday, he was certainly giving pretty free rein to his own version of what happened a month ago in Moscow. Poltoranin claimed that he had known a day in advance that there was to be a parliamentary rebellion. He therefore warned Victor Yerin, the interior minister, to make sure that the television station was properly guarded. But he was told, he says, not to worry: "We've got our own disguised people inside".

Sure enough, the next day the rebels stormed the TV tower, in a battle which cost several lives. They were "provoked" into doing so by the fact that it was not widely defended, claims Poltoranin. And, he says, censorship was imposed on the press afterwards in an attempt to suppress the truth about the incompetence of the security forces.

order its immediate lifting. Proof, if such were needed, that chaos rules at the top, and that presidential rule gives the president's aides plenty of room to pass the buck.

And what happened to Yerin the Unready? He was subsequently rewarded with a medal making him a Hero of Russia.

Mistaken identity

■ Whatever the significance of those unfamiliar Asian businessmen who appear in Midland Bank's brand new national advertising campaign?

"Shelker and Anil have a good business proposition. And we have a billion pounds to lend," boasts one of the many banks that has in the past been criticised for throwing good money after bad. "And we're lending some of that money to Shelker and Anil. And it's not a mistake; we did say a billion," it rounds up, less than wholly clarifying the matter.



I'll have to see its ID card before I can christen it

sympathy with the confusion generated.

"I'm a simple Yorkshireman; any ad I might write would never get past all those creative types," admits White, before adding that it was a mistake that the "mistake" hit was included in the final copy - accidentally left in from a very early draft.

Lotta washing

■ Joao Alves, the Brazilian federal deputy accused of masterminding a huge corruption scheme in the government's budget, seems to be temporarily down on his luck.

Giving evidence in front of a special inquiry into the scheme, he explained how "thanks to God" he had been fortunate with money since the late 1980s. Not surprisingly, there was considerable interest as to how, as a poorly paid congressman, he had built up a personal empire now worth an estimated \$6m, complete with luxury apartments, farms and even a rented Lear jet.

Alves did have one explanation for all this good fortune - the local lottery. In the past few years, the lottery company estimates he picked up more than 200 big prizes. Unfortunately for Alves, this in itself may not entirely convince his inquisitors in a country where lotteries are also known to provide opportunities for money laundering.

Female pitch

■ Kim Campbell's future may not lie in baseball, once Observer's helpful suggestion yesterday, but another woman apparently features on the short list to take over as the sport's next commissioner. She is Lynn Martin, formerly a Republican congresswoman from Illinois, George Bush's labour secretary and, though now a university teacher, still a player in national politics.

She would certainly need all her political wits about her in a position that has been vacant for over a year, since the owners of baseball's 26 teams summarily dismissed Fay

afford to support loss-making enterprises indefinitely. Without substantial reform, including job cuts, it will also be difficult to find buyers for the state's industrial assets.

The case of Air France, which is one of the 21 publicly owned groups slated for sale, illustrates the difficulty in striking a balance. But there are other cases too. The government is anxious to sell the loss-making Groupe Bull as quickly as possible to ease the drain on public sector funds. Earlier this month it was forced to inject FF7.7bn into the group to cover its accumulated losses. To restore the group to profitability, however, will require cutting at least 2,500 jobs, according to industry observers.

For the moment, the government's dilemma is eased by the fact that the groups which will begin the privatisation campaign are in relatively good health. Banque Nationale de Paris was successfully sold earlier this month. Rhône-Poulenc, the chemicals group, and Elf Aquitaine, the oil and gas group, which are next on the auction block, should also enjoy smooth sales. But the scale of the problems at Air France, Groupe Bull and other public sector groups such as Thomson-TCB, the consumer electronics group which is also losing money, requires remedies to be implemented quickly.

Mr Balladur can take some solace from a number of encouraging factors. The threat of industrial disputes is restricted largely to the public sector. Mr François Perigot, head of the French employers' federation, points out that the number of strikes in the private sector has fallen to the lowest level since 1985.

Recent economic indicators have also suggested the end of recession, and hence rising unemployment, could be in sight. Industrial production figures released last week showed a rise of 1.3 per cent in July and August over June, while housing starts in the third quarter increased by 8 per cent. Last week's interest rate cuts by the Bundesbank allowed France to follow suit.

Even with the government's optimistic scenario of a recovery from the fourth quarter of this year and 1.4 per cent growth in gross domestic product next year, however, the effect on unemployment will take time to feed through. Economists in Paris estimate it will take two or three quarters after the economy starts to recover before the rate of joblessness will stabilise.

Industry chiefs will continue to press for cuts in staff, and unions will resist. Air France is unlikely to represent Mr Balladur's final journey to the brink. On the evidence of that dispute, he seems unlikely to take the bold steps required to withstand the threat from unions.

airline managers. Mr Attali was no exception. He took over four years ago because he was strongly favoured by the Elysée palace, where his brother, Mr Jacques Attali, had long been a close confidant of President Mitterrand.

Air France has been a feudal barony, with management factions fighting each other, with the sides being decided by political and civil service colours.

Mr Attali accepted the need for change, but attempted a delicate balance between restructuring and maintaining the political consensus to enable him to run the airline.

Market pressures forced him to act vigorously. Indeed, he claimed the government had been closely consulted in his latest restructuring plan and that he had its full backing until a few days ago. The risk now is that, as the rest of the industry starts to recover, Air France will still be shackled by its past and will fail to take advantage of the eventual recovery cycle in the airline industry.

Even if the government is prepared to pay this price, it may find it particularly difficult to contain supporting the airline when state aids are coming under attack from Brussels and other big international carriers are turning themselves into fiercer competitors.

Vincent for being insufficiently solicitous concerning their imperious wishes.

Most of those previously considered, as well as those still in the race, have political backgrounds. George Bush and James Baker graciously declined to apply, and so last week did George Mitchell, top Democrat in the US Senate. But Paul Kirk, former national Democratic Party chairman, and Richard Thornburgh, ex-US attorney general, are still in there pitching.

Baseball has had some powerful, and wondrously named, commissioners over the years - Judge Kennesaw Mountain Landis, A B "Happy" Chandler, Bowie Kuhn and A Bartlett Giamatti, a former president of Yale.

The commissioner may get the best seats in the house, but be, or she, now operates on the shortest of leashes from the owners, as Vincent, an honourable man, discovered. In comparison, politics begins to look easy.

Off piste

■ Amid the fun, fashion and glamour of the Daily Mail's international ski show at London's Olympia this week, there is a sobering note. At a stand overlooking the artificial ski slope, The Will Partnership offers "professional will drafting". Clearly, some runs are not called The Widow Maker for nothing.

Decree will lay foundations of mortgage system Yeltsin to allow land sales under reform plan

By Leyla Boulton in Moscow

RUSSIAN president Boris Yeltsin was expected last night to sign a long-awaited decree allowing for the free sale and purchase of land, seven decades after the Bolsheviks abolished private property and farming.

Despite numerous decrees and laws proclaiming the right to private land ownership, introduced over the past two years, the Russian parliament had inserted into the old constitution a moratorium of 10 to 15 years on the right to resell land distributed to citizens by the state.

The decree will also lay the foundations for a mortgage system, enabling banks to lend money to farmers. The state had previously given state and collective farms, as well as fledgling private farmers, "credits" which were rarely returned. Commercial banks had steered clear of

lending from their own funds without collateral, and lending will remain difficult while inflation is more than 1,000 per cent a year.

Nonetheless, Russia already has several thousand private farmers, who cannot sell their land freely. Many urban dwellers already own small plots of land to build dachas and grow vegetables, even though there is no well-established market for buying and selling land.

Although details of the decree are not yet clear, partly because senior officials have been arguing over the final version, Izvestia newspaper yesterday criticised the plan, saying it gave too many rights to collective and state farms. Part of the problem with land reform so far has been the absence of a mechanism to implement previous orders that state and collective farms give land away to employees who want it.

Much work will still be needed to implement the decree. But efforts are already being made in this direction. The International Finance Corporation, the World Bank's private investment arm, has, for instance, developed a pilot project for the effective and fair distribution of land to employees of state and collective farms. It seeks to avoid opposition from hostile directors of such farms by giving them a vested interest in the development of market-based farming.

The main fear of opponents to a free land market was that foreigners and other rich individuals would buy up the country on the cheap. It is not yet clear whether the decree will be accompanied by restrictions on who can buy land. To encourage foreign investment, the government had said that investors who bought factories could own the land on which they were located.

Germany and US to exchange evidence in VW probe

By Christopher Parkes in Frankfurt

THIS WAY has been cleared for US and German criminal authorities to exchange evidence gathered in their parallel investigations of alleged theft and industrial espionage by Volkswagen executives.

The US Federal Bureau of Investigation has been granted access to German public prosecutors' files and it is understood that FBI data may be made available to Ms Dorothea Holland, head of the Darmstadt-based German probe.

The link is the first significant development in the case involving VW production director, Mr José Ignacio López de Arriortúa, and several associates, all former General Motors employees, since Ms Holland led a raid on Volkswagen's headquarters in August.

Mr López and his colleagues are suspected of systematically collecting vast quantities of industrial data while employed at GM and its German subsidiary, Adam Opel. He has admitted having ordered the destruction of "possibly sensitive" GM material at VW.

The German authorities granted the FBI access to Ms Holland's findings after top-level political and legal negotiations between Washington and Bonn and the regional government of Hesse.

Mr Georg Nauth, spokesman for the Darmstadt prosecutors' office, confirmed the move yesterday.

The request had come through diplomatic channels, said Mr Nauth. Such exchanges were "usual in many cases", but he could give no further details.

Ms Holland was still sifting data from 25 computers and 250 diskettes seized in the VW raid, in an "enormously complex" exercise, he added. Asked if new evidence had been found in the computers, he replied: "I don't want to say."

While the German investigation has slowed, the US probe has gained momentum with the summoning of a grand jury which will decide whether the evidence gathered justifies indictment.

So far the FBI has had access to all General Motors' material and affidavits involved in the case, and is also believed to have questioned officials from Volkswagen of America, VW's US subsidiary.

Possible charges against Mr López, his colleagues and the company, include wire or mail fraud, which carry possible penalties of imprisonment or heavy fines.

US law prohibits the use of postal or telecommunications services for illegal purposes which include "violations of obligations of loyalty and faithful service" to an employer.

Long haul for Air France

It is tough being an Attali twin: first Jacques departs the EBRD amid criticism he has spent too much money; then Bernard resigns as chairman of Air France for trying to save too much. The latter Mr Attali's plans to cut costs were modest in relation to the scale of Air France's problems, yet they were still sufficient to provoke the implacable opposition of the unions. His departure in such circumstances will only compound the challenges confronting his successor.

Air France is woefully over-staffed and deeply in loss. This may not have mattered much while the government remained indulgent and Europe's aviation industry costly subsidised. But Air France's rivals threaten to turn the competitive screw as the industry liberalises. British Airways, which is benefitting from a lower cost base following sterling's devaluation, is fast encroaching into the French market through TAT. Even the lacklustre Lufthansa has more resolve in pressing ahead with cost-cutting and privatisation. Its link-up with United could develop into a powerful threat to Air France. A consummation of the proposed Alcatraz alliance between four European airlines would also buffet the French carrier badly.

How the French government tackles this conundrum could develop into a fascinating clash between traditional dirigisme and new-found pro-market rhetoric. Air France boasts some attractive international routes and readily saleable assets. This may enable the government to privatise the carrier - but at a price determined by a broader view of the airline's prospects. That underlines the case for firm action by the government now.

THE LEX COLUMN

FT-SE Index: 3184.8 (-14.2)



been mixed. Creditable results in textile services and electronic security in the first half were offset by more pain in cleaning and plant hire. Comparisons with the best of the competition suggests margin improvements might be achieved through the kind of productivity drive the company now promises. But where prices are falling BET is running to stand still. The danger must be that prices will remain under pressure in its low-margin businesses even after economic recovery has taken hold.

Whether BET should continue to slug it out in areas with low barriers to entry - such as office cleaning and security guarding - is thus an open question. If these businesses continue to act as a drag on recovery there will be a strong argument for redeploying resources elsewhere. Having repaid £700m debt and preference shares over three years, BET can at least afford to wait and see.

BET

As befits a collection of late-cycle businesses, BET's shares turned seven months after the main body of the stock market. While the first increase in interim pre-tax profits since 1989 justifies the market's faith, progress has relied on self-help and a fair wind in the currency markets. Nearly three years after the arrival of Mr John Clark as chief executive, loss makers are still being weeded out and interest charges reduced. More of the same should be enough to maintain earnings momentum in the second half. By this time next year, though, BET will need to show decent margin improvements in businesses which have survived the axe.

So far the trading performance has

Paramount

The aura of unreality surrounding the bidding war for Paramount has only been marginally dispelled by the two rivals thumping more hard cash on the table. Viacom's move to match QVC Network's tender offer must give it the edge, at least momentarily. With Paramount's board remaining impervious to QVC's blandishments and a poison pill defence in place to frustrate a hostile bid, QVC has now been manoeuvred into a position where it either raises or folds its hand. There remains a real possibility that the bidding will climb, urged on by eager allies, QVC seems determined to press ahead. The prospect of another buyer entering the

fray cannot be ruled out. Already, both declared suitors are prepared to pay a premium of more than \$30m over Paramount's pre-bid market value. That premium alone is more than the market worth of either Viacom or QVC. The justification for such generosity is based on the synergies offered by the rapidly converging world of multi-media and the scarcity value of Hollywood studios. But it will require an extraordinary harmony of interests among the winning group to justify the price. A coherent alliance of media and telecommunication companies could perhaps make the sums stack up. There is less chance that a rag-bag of allies hastily assembled during the heat of a bid will be able to make the Paramount deal pay.

BTR/Hanson

The idea that good housekeeping is all that lies behind BTR's decision to float off its Graham builders merchants is perhaps a little too pat. BTR has owned Graham for 10 years, so it has scarcely rushed to the task. In part that may reflect the retirement of Sir Owen Green, who was attached to businesses he bought. BTR may also have had an eye to the high stock market valuations of building materials companies. Then again, while recovery stocks are selling at high multiples, their earnings are close to the bottom of the cycle. Significantly, BTR's cash flow was also boosted by recent warrant issues and the enhanced scrip dividend. The most persuasive argument for selling Graham now is to help fill the war chest for another acquisition.

Given its much lower rating, Hanson might consider a similar flotation. A sale to the stock market would certainly help cut gearing. Even more fashionably, demerging a highly-rated recovery company might increase shareholder value. Yet floating off UK businesses would institutionalise Hanson's advance corporation tax problem. In the US there may still be residual resentment of Smith Corona's poor performance after Hanson floated it. That might compel the company to offer attractive terms to get the deal away, undermining the point of the transaction. Besides, the more recovery businesses Hanson sold, the less attractive the remainder. Following the Quantum acquisition, Hanson will probably shed some of its peripheral US manufacturing businesses to cut borrowings. But trade sales look the most likely route.

Raves worth £2bn per year pose threat to drinks industry

By Diane Summers, in London

RAVES are now a £2bn (\$3bn) per year industry in the UK, challenging established leisure industries according to a study by the Henley Centre. The research and forecasting organisation, released yesterday.

Over a million young people a week are going to "rave" parties and spending an average of £35 a head on the activity, the study revealed.

The "staggering" spending figure - much of it on illegal drugs - is about the same size as the books or newspaper markets, and at least a quarter of the spirits market. The study excludes unlicensed raves which would increase the spending figures still further, said the centre. The parties, which are held in warehouses and halls within easy reach of metropolitan areas, attract 4,000-10,000 young people at a time, a large proportion of whom are under 21 years of age. Raves are usually alcohol-free but there is normally heavy consumption of drugs, said Henley.

Raves "pose a significant threat to spending for such sectors as licensed drinks retailers and drinks companies," says the study. Pub visits by young people declined by 11 per cent between 1987 and 1991 and Henley is forecasting a further decline of 9 per cent in 1992-97.

Henley calculates that the average admission charge to a rave is £15, spending on drugs is typically £3-£5 for LSD; £15 for ecstasy; £5 for speed; £15 for cannabis; mineral water is £1 a bottle; and cigarettes cost £3. Using these figures, the report says it is clear the minimum spend at a rave is likely to be about £20 per person and the maximum could be about £50.

Henley uses an average figure of £35 per visit per person to produce a weekly spend of £35m for the million participants. The percentage of 16-24-year-olds taking illegal drugs has doubled to nearly 30 per cent over the three years to 1992, says the report.

As well as apparently diverting spending on alcohol to drugs, raves are extremely time-consuming, displacing "much of the time and energy which might have been expended on other leisure activities".

Leisure Futures volume 3, Henley Centre, 9 Brindley Place, London EC4V 6AY. £375

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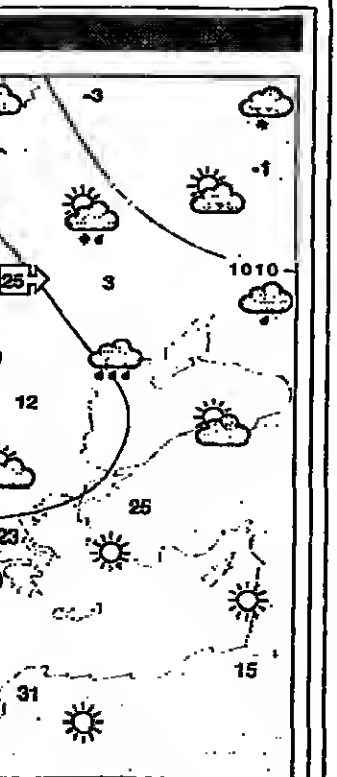
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ut of the Netherlands			
24	Rio	showers	34
12	Riyadh	sun	33
city	Rome	sun	21
air	S. Frisco	sun	29
19	Seoul	fair	15
nd	Singapore	showers	31
12	Stockholm	cloudy	8
7	Strasbourg	cloudy	11
rw	Sydney	showers	18
8	Taipei	fair	21
27	Tel Aviv	sun	30
city	Tokyo	fair	17
31	Toronto	cloudy	17
13	Tunisi	showers	24
17	Vancouver	sun	15
30	Venice	fair	15
11	Vienna	fair	7
12	Washington	rain	16
9	Wellington	fair	17
32	Wien	fair	7

ROLLS-ROYCE

£70 MILLION POWER STATION CONTRACT COMPLETED

A Rolls-Royce company, Parsons Turbine Generators, has completed a major contract to convert the Malaysian Connaught Bridge power station to combined cycle operation. The plant came into operation in February this year, on schedule, to meet heavy demand on the Malaysian power system. The project was a collaboration between Rolls-Royce and the Malaysian company Tenaga Nasional Berhad, and achieved its aims of increasing the power station's capacity at low cost, without disruption to electrical output or damage to the environment.

TWO SUCCESS STORIES FOR THE ROLLS-ROYCE TRENT

Rolls-Royce has delivered its first Trent 700 engine, on time, to Airbus Industrie in France. This engine will be used for installation and systems checks at Airbus; additional engines will be delivered to begin flight testing in February 1994. The Trent 700 has already won 46% of orders for the new Airbus A330. Meanwhile, the Trent 800, a more powerful version, has completed a successful first series of tests at Rolls-Royce's Derby facility. It is expected to win its airworthiness certification in February 1995, entering service on Thai Airways International's Boeing 777s in 1996.



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INTERNATIONAL COMPANIES AND FINANCE

BMW ahead of industry trend despite fall in sales

By Christopher Parkes in Frankfurt

BMW is continuing to resist the worst effects of recession, the luxury German carmaker claimed yesterday.

Although sales fell 9.8 per cent to 406,500 units in the first nine months of this year, deliveries were still higher than for the same period of 1992, the last "normal" year before German unification, it said.

Production, at 396,700 cars, was down 12 per cent compared with 25 per cent for the German automotive industry as a whole. BMW exports were

only 7 per cent lower, compared with an overall drop of more than 20 per cent.

Turnover also fell a relatively modest 6.6 per cent to DM21.9bn (\$13.1bn).

The company had been able to "build a bridge over the cyclical dip", it said.

In the domestic market, a 22 per cent rise in sales in eastern Germany, to 15,100, helped offset a 17 per cent decline in the west, where new registrations overall are down 19 per cent.

BMW attributed much of its relative success to growth in north America and south-east Asia, where deliveries rose 17

per cent and 24 per cent respectively. With an eye on further high-potential markets, the company is preparing to open assembly plants in the Philippines and Vietnam.

Yesterday's figures suggest a marginal improvement from the halfway mark, when turnover was 9.8 per cent lower than in 1992, and when the company reported net earnings down 39 per cent at DM255m.

Although the international market appeared to have reached the bottom of the slump, recovery is not expected to appear before the middle of 1994.

Investors approve new loan limits at Tiphook

By Andrew Bolger in London

SHAREHOLDERS of Tiphook, the UK container leasing group, yesterday gave chairman Mr Robert Montague the go-ahead to increase borrowing limits, which the loss-making group needs while it renegotiates new covenants with its bankers.

In a tough day for the company head, who confirmed he would split his role with a chief executive, the group's founder fielded shareholder complaints about the board's performance. The group's market value has dropped by 66 per cent since March.

The meeting got off to a sticky start when Mr Montague asked if he could take as read the sole resolution before the meeting, which increased the group's borrowing limit to £1.3bn (\$1.82bn), equivalent to six times shareholders' funds. One shareholder insisted the resolution be read out "because I'm not sure members of this board can tell a million from a trillion".

The chairman's difficulty arose as he said he had been advised by Freshfields, the group's lawyers, that he was restricted in what he could tell the meeting. He could give the shareholders no assurance their stake would not be diluted by any refinancing, nor give any new information about the group's borrowing or trading.

The same shareholder berated the chairman for sheltering behind the advice of his lawyers.

Mr Montague said it would not be in the interests of either shareholders or the company to give out more information until the resolution had been passed and the support of the bankers secured. But he promised to inform investors of any further developments as soon as possible.

Another shareholder suggested the board should take large cuts in salary to share the same pain as the shareholders. Mr Montague, who last year earned £851,000, said directors had promised at last month's AGM to take pay cuts.

The new word on everyone's lips

Privatisation will shine the spotlight on Seita, writes David Buchan

ALMOST everyone has seen, smelt or tasted something produced by Société Nationale d'Exploitation Industrielle des Tabacs et Allumettes (Seita). However, the company remains relatively unknown.

This is in spite of the fact that its Gitanes cigarettes, with the swaying gypsy lady on the packet, and the Asterix-like winged helmet on Gauloises packaging have become national symbols. Seita, however, is destined to become better known following the Balladur government's decision to put it on the list of 21 companies to be sold to the public.

Given the recession depressing prospects for so many other privatisation candidates, Seita's sale could be sooner rather than later. "We are a very uncyclical enterprise," says Mr Eric Albrand, finance director, "and the timing [of privatisation] would depend more on finding a certain number of buyers than on the economic context."

Seita and British American Tobacco (BAT) are already eyeing each other with interest. BAT makes no secret of the fact that its recent "financial" investment in the Banque Nationale de Paris privatisation was partly designed to smooth its political path to an "industrial" investment in Seita. At an overall estimated value of between FF77bn and FF99bn (\$11.2bn-\$15.1bn), Seita's sale could be easily slotted in between larger candidates.

However, before it goes on to the privatisation slipway, Seita needs to be stripped of its residual monopolies. These still give it the right to manufacture all tobacco products in France and to import all tobacco products from outside the EC. However, they no longer confer any commercial advantage to the company.

"It has simply meant that the benefits to Seita of this latest lifting of price control has been neutralised by three increases in tobacco taxes in the past 18 months. The fact that some of Seita's competitors have cut, rather than increased, their prices in order to gain market share has not helped either."

Seita had nearly half the French market last year. Its overwhelming strength, however, is still in dark tobacco, a market which is declining by between 7 and 8 per cent a year. In the steadily more fashionable light tobacco, which now accounts for two-thirds of what is smoked in France, Seita was last year second to Philip Morris and just ahead of Rothmans. Both Seita and Rothmans have lost market share this year to Reynolds, which has been cutting the price of its Winston brand.

Overall, the French market has dipped. After average growth of 0.8 per cent during the 1980s, cigarette consumption fell by 0.3 per cent last year, and by 3 per cent in the first eight months of this year.

Mr Albrand blames the decline on price/tax increases, and on the new law banning tobacco advertising everywhere except inside France's 36,400 officially-designated tobacco shops, the only legal outlet for tobacco in the country.

The tobacco system suits the government, because it reduces evasion of tobacco tax, and tobacco sales usefully cross-subsidise corner shops which would otherwise have to close

down in rural areas. The system also suits Seita. It does not own the tobacco, but it might as well, because it is effectively their sole tobacco supplier, furnishing them with other companies' cigarettes as well as its own.

Seita also makes money out of the network by distributing local communes' parking permits, and France Telecom's telephone cards, to the tobacco for sale.

Seita's incestuous relationship with the tobacco will not change with privatisation; it rests on economies of scale and efficient service rather than the law. However, it is hard to see how investing in Seita would give, for example, BAT any edge in selling its products in French tobacco; the neutrality clause in Seita's distribution contracts would prevent that.

Given that Gitanes or Gauloises are part of France's image in the world, Seita believes the government will seek some core domestic shareholders. So far the only French shareholder to show interest is the Bolloré shipping group, in which Rothmans has a stake.

Seita sees a much better fit with BAT, which is strong in areas of where Seita is weak - Latin America, east Asia and English-speaking Africa.

Another fit for Seita would be Reemtsma of Germany. The two companies already operate jointly in Belgium, Switzerland and Italy, and the German company could provide Seita with an entrée into east Europe and Russia.

There was still uncertainty about how European fertiliser markets would develop, he said.

Credit Suisse expects advance

By Ian Rodger in Zurich

CREDIT SUISSE, flagship bank of the CS Holding financial services group, said its consolidated pre-tax profit in the third quarter "showed a marked increase" over last year. It expected a "good performance" for the full year.

No earnings figures were given. The bank earlier reported half-year pre-tax profits of SF7.4bn (\$4.6bn), 67 per cent higher than in the first half of 1993.

Credit Suisse said its invest-

ment and trading business continued to benefit from favourable market conditions in the third quarter. The Credit Suisse Financial Products derivatives subsidiary was an important source of income.

Progress in merging Swiss Volksbank, acquired last spring for SF1.6bn, was bringing the expected cost savings.

However, the bank warned that loan-loss provisions remained high because of the recession, especially in Switzerland.

Consolidated total assets

stood at SF728.4bn at the end of September, 32 per cent above a year earlier. Three-quarters of the growth came from the Volksbank takeover.

Balance sheet business remained weak because of the recession. Lendings at the end of the third quarter stood at SF125.6bn, 2.9 per cent lower than at the end of June.

Forbo, the Swiss wall and floor coverings group, said profit before interest and tax in the first nine months was SF3.2m to SF7.0m, on sales down 6 per cent to SF1.3bn.

Shake-up pays off at Swedish mining group

TRELLEBORG, the troubled Swedish mining and metals group, said yesterday it had raised SKr900m (\$111m) through the sale of its remaining shares in Svedala, the mineral processing and transport unit, writes Hugh Carnegie in Stockholm. It would raise a further SKr1.3bn through the pending sale of a 75 per cent stake in Munksjö, its paper and packaging subsidiary.

The disposals are part of a restructuring to staunch a heavy flow of losses and pare its SKr10bn debt burden. The group, hit by falling world metals prices, intends to concentrate on its core mining, metals and rubber operations.

BET takes another step towards recovery

By Andrew Bolger

BET, the UK business services group which overstretched itself in a series of 1980s acquisitions, took another step on its road to rehabilitation yesterday by reporting a 24 per cent increase in pre-tax profits.

However, sales fell slightly, to £1.03bn (\$1.52bn) from £1.09bn, in the six months to September 25. Reduced losses from discontinued operations and lower interest costs mainly accounted for the increase in pre-tax profits to £47m from a restated £36m.

The group warned: "Conditions in our market are likely to remain tough for some time."

Despite the significant cost reductions that have been made, pressure on margins persisted.

Mr John Clark, chief executive, said BET's three-year restructuring programme was almost complete, although there would be more disposals.

Net borrowings were cut to 29m from 55.2m, giving gearing of 3 per cent. Interest payments fell to £3.2m from £3.2m. Earnings per share rose to 3.3p from 1.5p. The interim dividend was cut to 1p from 2p, in line with an intention to make the final larger than the interim. Lex, Page 16

Asset disposal helps boost Norsk Hydro

By Karen Fosli in Oslo

NORSK HYDRO, Norway's biggest stock-listed company, yesterday reported a rise in nine-month net profit, to Nkr2.89bn (\$396m) from Nkr2.61bn. It was helped by a large gain on the disposal of its 38.3 per cent stake in Freia Marabou, Scandinavia's biggest chocolate producer.

Even discounting the gain, Hydro said group results improved during all three quarters of 1993. It attributed

this primarily to lower production costs, higher crude oil production, and the effect of a higher dollar exchange rate.

With this year's result affected by a pre-tax gain of Nkr2.53bn on the Freia disposal, and last year's by changes to the US accounting code (GAAP), Hydro said the two figures were not directly comparable.

"When these factors are excluded, net income for the first nine months of 1993 is calculated to be Nkr1.067bn, com-

pared with Nkr647m for the same period last year," it said.

Group revenue in the first three quarters rose by Nkr2.44bn to Nkr46.07bn, with operating income climbed Nkr1.11bn to Nkr3.35bn. Operating costs shot up by Nkr1.23bn to Nkr38.73bn.

"Our business areas are still affected by difficult market conditions," said Mr Egil Myklebust, president.

He attributed the improvement in operating income to reductions in production costs

and higher crude oil output.

"Oil and gas, petrochemicals and agriculture all show progress, while there was a certain decline for light metals. This was due to a particularly difficult market situation for both aluminium and magnesium. Our fertiliser operations have increased sales, but have not achieved higher prices," Mr Myklebust said.

There was still uncertainty about how European fertiliser markets would develop, he said.

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Celsius

Extract from the Celsius Industries Corp. interim report for the period January-August 1993. The full report is available on request from Celsius Industries Corp.

- Income after net financial items for the period January-August 1993 totalled SEK 425 M, a 23% increase compared with the same period in the preceding year.
- Anticipated income for the full twelve month period has been revised upward to approximately SEK 625 M.
- The backlog of orders on August 31 amounted to approximately SEK 26,000 M, including approximately SEK 7,600 M in orders received for the period.
- The financial position of the Celsius Group remains strong. Equity has risen by SEK 359 M to SEK 3,300 M since the start of the year, corresponding to SEK 118 per share.

Key indicators			
SEK M	Jan-Aug 1993	Jan-Aug 1992	Full year 1992
Sales	7,190	7,691	10,484
Income after financial items	425	345	545
Equity	3,300	2,720	2,941
Liquid funds	4,662	5,357	4,546
Equity/assets ratio, %	22	20	23
Profit per share, after tax (SEK)	13.10	11.50	18.40
Equity per share	118	109	108

Celsius Industries is Sweden's leading defence industry group, and one of the ten largest defence industries in Europe.

Group companies which focus on the defence sector are Kockums, Bofors, CelsiusTech, FFV Aerotech and Telub. The Celsius Group also comprises companies with a non-military focus, most of which are gathered under Celsius Invest.

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Sale of Inco to third

Canada f improve i

Battle for

Sale of unit lifts Inco to \$91.2m in third quarter

By Bernard Simon in Toronto

THE sale of a gold-mining subsidiary enabled Inco, the world's biggest nickel producer, to post a strong third-quarter profit in the face of a 25 per cent fall in nickel prices. Third-quarter earnings rose to \$91.2m, or 83 cents a share, from \$10.8m, or nine cents, a year earlier. The increase was entirely due, however, to an after-tax gain of \$127.9m, or \$1.16 a share, from Inco's disposal of its 62 per cent stake in TVX Gold.

The weaker nickel price, as well as lower prices for copper, cobalt and rhodium, resulted in a sharp reversal in operating performance, from earnings of \$70m to a \$13m loss.

Net sales slumped to \$468m from \$608m, in spite of virtually unchanged metal deliveries.

Nickel shipments totalled 111m lbs, compared with 112m lbs a year ago, but the

average price received fell to \$2.50 a lb from \$3.47. One silver lining was a turnaround in the troubled alloys and engineered products division, from a \$7m operating loss to earnings of \$2m. Inco said that lower prices were offset by reduced costs.

Finished nickel inventories fell to 40m lbs on September 30 from 71m lbs a year earlier as a result of holiday shutdowns. Inco earlier this month announced a 16 per cent reduction in planned 1994 nickel output, with the bulk of the cutbacks taking place in the third quarter.

The company said yesterday that it "will continue to monitor market conditions to determine whether additional measures will be required". Proceeds from the TVX sale reduced the debt-to-equity ratio to 37:63, the lowest level in three years.

Long-term debt has been cut to \$925m from \$1.08bn.

Losses at Asarco after metal prices fall

By Laine Morse in Chicago

PLUMMETING copper, lead, and zinc prices contributed to a third-quarter loss at Asarco, the integrated US mining company.

It suffered a net loss of \$3m, or 8 cents a share, compared with profits of \$18.1m, or 44 cents, in the third quarter of 1992. Sales were \$425.2m, down from \$490m a year ago. For the first nine months, Asarco posted a loss of \$58m, or \$1.40 a share, against a gain of \$23.8m, or 69 cents, before extraordinary charges. Year-to-date sales are \$1.3bn, down from \$1.4bn in the first nine months of 1992.

Asarco said its average realised price for copper dropped to 86 cents a lb in the third quarter, down from \$1.13 a year earlier. Zinc prices were down 20 cents a lb, to 41 cents, and lead prices down 12 cents, to 19 cents a lb this quarter.

The company's average realised price for gold and silver gained, but volumes were not sufficient to offset price declines in copper.

Mr Richard Osborne, chairman, said the decline in metal prices reduced net earnings for the quarter by \$33.6m from levels a year ago.

Asarco realised an after-tax gain of \$5.4m from the sale during the quarter of 9.9 per cent of Asarco Australia. AMAX, the diversified US aluminium and coal company, reported third-quarter net losses of \$60.7m, or 77 cents a share, from last year's loss of \$24.6m, or 29 cents.

The company had an operating loss of \$15m in the third quarter, against an operating profit of \$14.4m in the same quarter a year ago. Sales for the quarter fell to \$993.3m, from \$939m last year.

Amex, which is in merger negotiations with another large metals and mining group, Denver-based Cyprus Minerals, said depressed worldwide aluminium prices would keep the pre-merger results under pressure into 1994.

Amex and Cyprus shareholders will vote on the merger plan on November 12. Under the plan Amex will spin off its aluminium operation, Alumax, as an independent, publicly-held company.

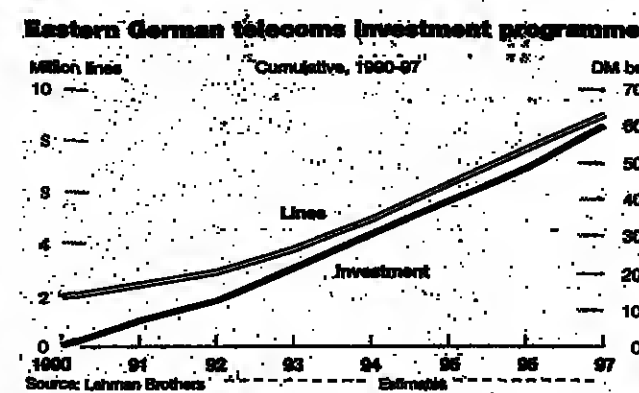
Analysis says the global aluminium glut will make the spin-off difficult, but Mr Allen Born, Amex chairman, said the subsidiary was already adopting price protection programmes to stabilise revenue, and was considering diversifying into higher-value aluminium product manufacturing. For the first nine months Amex reported a loss of \$170.6m, or \$2.18 on sales of \$2.6bn, compared with a loss of \$133.3m, or \$1.63, on sales of \$2.6bn in the same 1992 period.

Deutsche Telekom hangs on for sell-off call

The German group's privatisation faces political hurdles, writes Ariane Genillard



Mr Helmut Rieke, chief executive of Deutsche Telekom (DT), is generally unflappable. But he talks in almost apocalyptic terms about the privatisation of Germany's state-owned telecommunications company. "It is five to midnight," he says.



His fear is that the international political debate on privatisation could delay the process until well beyond next year's 19 federal and state elections.

That, he says, would severely hamper DT in its attempt to become a first division competitor in and beyond Europe's liberalising telecoms markets.

Even in its home market, DT faces unprecedented competition. The company will lose its monopoly on ordinary telephone services in January 1998, when the European Community opens up national telecommunications markets to competition.

It already faces competition in the high-growth satellite and mobile markets. Two years ago, Mannesmann, the industrial group, was granted a licence to operate a second national cellular phone network in competition with DT's. It now has a 50 per cent stake in the venture.

The Brussels deadline gives DT five years to become competitive, but Mr Rieke is anxious to get the privatisation process under way long before then. So is Chancellor Helmut Kohl's government, which has been pressing for a sale for the past two years. However, privatisation requires a constitutional amendment, and to achieve the required two-thirds majority, the support of the opposition Social Democrats (SPD) is needed.

Most SPD leaders are not opposed to privatisation in principle. They appreciate the 1998 deadline, and the need for DT to be able to raise funds on the stock market in order to continue its large investment in eastern Germany. However, the SPD wants to retain significant state controls over a privatised DT.

As a compromise, the government has agreed to create a holding company in which it will keep a majority stake until full EC liberalisation. But before even partial privatisation can proceed, government and opposition have large differences to settle over how much managerial influence the holding company will be granted.

The government has drafted a 1,000-page privatisation bill, which is the subject of negotiations between the government and SPD.

The bill is reported to give only a minor role to the holding company. Ministers argue that in order to achieve the objectives of privatisation, DT must have sufficient manage-



Helmut Rieke: debate on privatisation could delay the process

are civil servants who enjoy benefits such as life employment and special pension funds.

The privileged status of German civil servants is written in the constitution and cannot be modified against their will. Mr Rieke hopes that after privatisation, financial incentives will motivate many of them to retire early or become regular employees. But such plans are regarded with suspicion by the 550,000-strong Post Trada Union, which has strong links with the SPD.

The union and SPD accept DT will have to stop subsidising the post and postal bank and become an independent shareholders' entity. But they still have two demands. They want the constitution to specify the duty of a private DT to service all parts of Germany, regardless of the population density. The post ministry maintains this is a regulatory matter, not a constitutional one.

The union wants to retain some influence over DT's management. It wants voting rights on important issues such as wage settlements and redundancies, and is particularly

afraid of Mr Rieke's desire to slash 30,000 jobs by 2000. DT contends any such restraint will simply slow down the pace of change, to the detriment of all DT employees.

DT managers want the freedom to take risks in the global market. A DT-led consortium is the front runner to become strategic partner in the privatisation of Matav, the Hungary state telecoms operator. But in general, argues Mr Klaus Grewlich, DT's director for international affairs, foreign partners are looking for a private company free from state interference.

Government and opposition risk clashing on such issues throughout the autumn as they finalise the privatisation bill.

If no compromise is reached soon, it is highly unlikely the current 1996 privatisation date can be kept.

This is the second in a series on the privatisation of Europe's state telecommunications operators. The first appeared on October 11; the third appears on Thursday.

Canada forest groups improve in third term

By Robert Gibbons in Montreal

CANADIAN forest products companies improved their results sharply in the third quarter, due to good building materials markets and a lower Canadian dollar. However, their performance for all 1993 will be volatile.

The industry has been fighting recession and weak prices since 1989, its last good year. Building materials were the first to rally early this year, with rising US housing stocks helping integrated companies and specialised Western timber producers. After a summer slowdown, construction timber prices are rising again as inventories are rebuilt.

Noranda Forest posted third-quarter profits of \$38m, or 3 cents a share, against a loss of \$17m, or 16 cents, a year earlier.

For the nine months it had a loss of \$42m, or 38 cents, against a net charge of \$38m on the

sale of its 49 per cent stake in MacMillan Bloedel.

This compared with a loss of \$32m, or 55 cents, on revenues of \$31.13bn (excluding MacMillan), against \$33.3bn.

MacMillan Bloedel, the most diversified group, lost \$320.7m, or 19 cents, in the third quarter, against a loss of \$314.2m, or 16 cents. Nine-month profit was \$348.1m or 39 cents, compared with a loss of \$323.3m, or 35 cents a share.

Domtar, an eastern Canada newsprint producer, earned \$31.2m, or 3 cents, in the third quarter, against a loss of \$45.5m, or 18 cents. Nine-month profit was \$39.7m, or 26 cents, compared with a loss of \$17.1m, or 57 cents.

Domtar Industries, the timber and pulp group, earned \$31.2m, or 30 cents, in the third quarter, against \$312,000, or 9 cents. Nine-month profit was \$33.7m, or \$31.14, against \$32.4m, or 70 cents, including special gains in both periods.

Battle for dairy resumes

THE takeover battle for control of Associated Dairies, the Victorian dairy products company, has stepped up again with the two rival bidders - Australian Co-Operative Foods and QUF Industries - raising their offers, writes Nikki Tait in Sydney.

Sydney-based ACF moved first, increasing its offer to A\$3.25 a share from A\$2.85 previously.

This exceeded the A\$2.97 a share on offer by QUF. However, within hours, the Queensland-based company had announced it would pay \$3.35 a share, or A\$81.3m (US\$54.6m) for Associated Dairies.

ACF holds a 19.9 per cent stake in Associated Dairies, so now has the option of exiting from the battle with a profit. Alternatively, it could raise its terms for a third time.

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2495	2595	2695	2795	2895	2995	3095	3195
3295	3395	3495	3595	3695	3795	3895	3995
4095	4195	4295	4395	4495	4595	4695	4795
4895	4995	5095	5195	5295	5395	5495	5595
5695	5795	5895	5995	6095	6195	6295	6395
6495	6595	6695	6795	6895	6995	7095	7195
7295	7395	7495	7595	7695	7795	7895	7995
8095	8195	8295	8395	8495	8595	8695	8795
8895	8995	9095	9195	9295	9395	9495	9595
9695	9795	9895	9995	10095	10195	10295	10395
10495	10595	10695	10795	10895	10995	11095	

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INTERNATIONAL COMPANIES AND FINANCE

Exxon lifted by asset sales and cost reductions

By Richard Waters in New York

EXXON comfortably exceeded market expectations yesterday with third-quarter profits which were bolstered by recent cost-cutting and disposals of assets.

The US energy group's 19 per cent rise in net income for the period, compared with the previous year, came against a backdrop of lower oil prices which has held back earnings at other oil companies.

"These strong earnings were generated despite soft worldwide economic conditions, weak crude oil prices, and provisions associated with the tax rate increase in the US," said Mr Lee Raymond, chairman.

Net income for the period rose to \$1.36bn, or \$1.09 a share, from \$1.15bn, or 91 cents, on sales down to \$27.9bn from \$30.6bn.

On Wall Street, Exxon's shares rose 3% to \$55, by early afternoon.

While exploration and production profits in the US remained flat, at \$273m, overseas earnings in this area jumped to \$549m from \$463m.

US downstream operations, on the other hand, recorded an increase to \$121m from \$93m, while overseas earnings rose only slightly to \$47m.

Falling oil prices, while holding back upstream earnings in the US, had been more than offset by the improvement in margins in petroleum products that resulted from cheaper

oil, Mr Raymond said.

Exxon said the results benefited from lower operating costs, the effects of its asset management programme, under which it sold assets which were marginal or did not fit its long-term plans, and lower tax rates in some overseas countries.

● Atlantic Richfield (Arco) said net income in the third quarter fell to \$68m from \$32m in the previous year due to the increase in the US corporate tax rate and the cost of settling a legal action.

The results were held back by an after-tax charge of \$115m resulting from the effect of the tax rate rise on deferred taxes.

The company recorded after-tax charges of \$50m against the costs of litigation.

These mostly related to the decision by the US Court of Appeals to confirm a judgment against the company in a class action suit over breaches of energy pricing regulations between 1973-81.

Earnings per share fell to 42 cents from \$2.06, on sales down to \$4.55bn, from \$4.83bn.

● Arco is to reorganise some of its oil and gas operations, resulting in a "substantial" change to fourth-quarter earnings, Reuter adds.

The group said that it expected to cut between 900 and 1,000 jobs by the end of the transition period. The reorganisation of Arco Oil and Gas Co should result in annual after-tax cost-savings of about \$100m, the company said.

Goodyear meets profit projections with \$136m

By Karen Zagor in New York

GOODYEAR Tire & Rubber, the last of the big US-owned tyre companies, yesterday posted third-quarter profits at the top end of its projections.

The Akron, Ohio-based company earned \$136.2m, or 92 cents a share, in the 1993 third quarter, compared with net income \$91.5m, or 84 cents, in the same period of last year.

Earlier this month, Goodyear predicted earnings of \$130m to \$135m for the quarter.

Sales in the three months slipped to \$2.9bn from \$3bn. The company attributed the decline to currency translations and weakness in world economies. In addition, 1992 sales included \$22m from subsequently divested businesses.

Goodyear said that its business unit operating margins of 10.5 per cent for the quarter continued to exceed its long-term objective of 10 per cent.

The company has cut costs, reduced sales and administrative expenses and improved its manufacturing efficiency.

Unit sales of tyres rose in the quarter, led by Goodyear's premium lines in the US and by light and medium truck tyre sales worldwide. Operating income from tyres rose 12.3 per cent to \$261.2m in the quarter, although sales eased slightly to \$2.5bn.

The company's general products division had operating income of \$47.3m, including one-time gains of \$9.1m from the sale of its Renner Films business. A year earlier, the business had operating income of \$46.3m.

Goodyear's oil transportation operations continued to post an operating loss in the quarter of \$2.4m, compared with \$2.6m a year earlier.

Results for the first nine months were muddled by special items in both years. Including these, Goodyear posted net income of \$360.9m, or \$2.47, against a net loss of \$746.1m, or \$5.24 a year ago.

Stripping out extraordinary items, last year's accounting changes and adjusting for a two-for-one stock split, Goodyear earned \$375.5m, or \$2.57, in the first nine months of this year, compared with \$264.5m, or \$1.86, in the same period of last year.

General Mills names president

GENERAL Mills, the US foods and restaurants group, has named Mr Stephen Sanger as president of the company, a new position, agencies report.

Mr Sanger was vice-chairman with responsibility for Big G cereals, Red Lobster and The Olive Garden restaurants, Yoplait yogurt and the consumer foods sales division.

General Mills named Mr Stephen Delmerit as chief executive officer of Cereal Partners Worldwide.

He is a senior vice-president at General Mills.

No quick recovery from IBM's big blues

Analysts see further losses at the troubled computer group. Louise Kehoe reports

THE summer of 1993 brought big changes for International Business Machines. These included a new management structure and accelerated cost cutting - but not, it appears, any sign of recovery from two years of heavy losses.

Even the most optimistic analysts are predicting that today, IBM, once the bluest of the blue chip stocks, will report a loss for its third quarter. The only question is how deep the red ink will flow.

While the consensus is an operating loss of about \$170m, or 30 cents per share, it could be double that, some IBM-watchers fear.

The stage has been set for IBM by disappointing results from several other companies in the computer sector. Digital Equipment, in the midst of restructuring, last week reported net losses of \$33m on revenues of \$3bn for its first quarter, in spite of a \$20m lift from accounting changes.

Digital's revenues declined almost 10 per cent from the same period last year, reflecting weak sales in Europe - particularly Germany and Italy - the company said. Even Hewlett-Packard, which earlier reported a 44 per cent earnings rise to \$271m for its third quarter, ending in July, with revenues up 23 per cent at \$5bn, saw a sharp drop in European order growth rates to 10 per cent, from 28 per cent growth in the previous quarter.

Depressed economic conditions in Europe, the largest export market for the US computer industry, are taking their toll on companies and IBM is

expected to be no exception. Last year, European sales of \$2.75bn accounted for almost 37 per cent of IBM's total revenues. Germany, Italy and France are IBM's largest European markets. Thus the continuing weakness of the European economy represents one of the most formidable barriers to IBM's efforts to return to profitability.

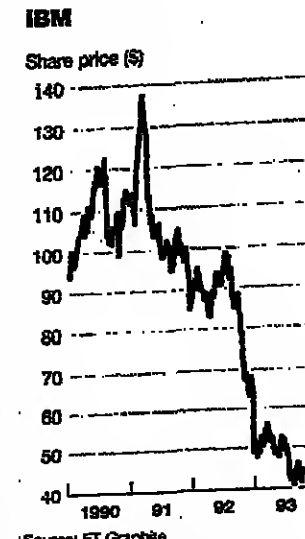
Another factor in the gloomy projections for IBM's third-quarter performance is rapidly declining mainframe computer prices. Mainframe computers, together with associated storage devices represent about 20 per cent of IBM's revenues.

Amdahl, one of IBM's direct competitors in the mainframe computer market, is due to report this week. The company has warned it expected to report an operating loss "considerably larger" than its second-quarter \$23.7m loss.

The company cited slow mainframe computer sales and intense competitive pressure on pricing as the principal reasons for anticipated losses. Industry analysts say mainframe prices have declined by about 40 per cent in the 12 months ending in July, with IBM driving the trend with heavy discounting.

The personal computer market, in contrast, is rising and after losing market share to competitors, the IBM PC is on the rebound. IBM's share of the worldwide PC market rose to 14.9 per cent in the first quarter of this year from 10.9 per cent in 1992, according to IDC, a market research group.

Yet IBM's ability to take advantage of strong demand



for its PCs has been hampered by parts shortages. In particular, IBM has been unable to get enough of the active-matrix flat panel displays used in its popular Thinkpad portable notebook computers.

Analysts estimate IBM may have lost as much as \$1bn of business in the third quarter because of inability to keep pace with demand for its PC products.

Similar problems dogged Apple Computer and Compaq Computer last year and industry executives see the ability to forecast demand accurately - and order parts in advance - as a critical element of success in the PC market that IBM has yet to master.

Rival Compaq Computer, which last week reported a 64 per cent jump in sales to \$1.75bn for the third quarter, with income more than dou-

bling to \$107m, seems to have been the chief beneficiary of IBM's supply constraints.

"Compaq is well prepared with manufacturing capacity and parts availability to take advantage of the strong demand we are experiencing," said Mr Eckhard Pfeiffer, Compaq president and chief executive.

As in other segments of the computer industry, personal computer profit margins are declining rapidly amid intense price competition.

Apple Computer, which reported its results this month, saw gross margins fall to below 26 per cent from above 40 per cent in spite of record revenues of \$2.14bn for its fourth fiscal quarter. Apple recorded a meagre net profit of \$2.7m, down 97 per cent from the same period last year.

IBM's painful struggles to adjust to lower gross margins have seen its workforce cut by 125,000 since the end of 1988. Another 60,000 workers are expected to leave the company before the end of 1994. The company has written off \$2.9bn in assets this year, half of it in manufacturing facilities.

While the short-term outlook for IBM is still bleak, at least one analyst believes Big Blue is on the right track.

"I'm not predicting it will happen in the fourth quarter or in the first quarter of next year, but the ingredients are in place for a recovery," says Mr John Jones of Salomon Brothers in San Francisco.

IBM's operating expenses and manufacturing costs are now "almost at parity" with industry competi-

tors, Mr Jones says.

There is a new "fire in the belly" of its product divisions, a new determination to beat external competitors rather than squabble among internal divisions, he believes.

The decline in IBM's mainframe computer business will bottom out in 1995-1996, Mr Jones predicts. The company's introduction - expected next year - of parallel processing mainframe computer technology could lead to a reduction in mainframe computer costs, creating stronger demand.

"Of the data stores in Fortune 500 companies, 80 per cent is on mainframe computers today," Mr Jones points out. He expects IBM's new parallel processing technology, which will not require any software changes, to be an important factor in IBM's recovery.

New sources of revenue and profit for IBM include its emerging merchant semiconductor business.

Until recently, it has manufactured semiconductor chips only for its own use, but it has set aggressive goals to become a multi-billion dollar chip supplier to outside customers over the next few years.

Chips are one example of IBM's strategy to sell technology, components and even finished products to other companies, rather than end-users. IBM has set a goal of \$3bn in original-equipment sales to industry customers this year.

These efforts are unlikely to yield short-term returns and today's third-quarter financial report is expected to demonstrate that there is no quick fix for IBM's big blues.

NEWS IN BRIEF

Apple launches combined CD, TV and PC

By Louise Kehoe in San Francisco

APPLE Computer yesterday launched a Macintosh television that combines the functions of a Macintosh personal computer with a television set and a compact disc player.

Designed for home and higher education users, the \$2,079 system is available only in the US. The product signals an industry trend towards combining computing and entertainment technology.

In a single unit, the Macintosh television provides the functions of a personal computer with a cable-ready 14-inch colour television, and audio CD player for stereo sound. The system can also be connected to a VCR, camcorder, laser disc player or video game player.

"The computer industry and the consumer electronics market are converging," said Mr Brodie Keast, director of product marketing for the Apple Personal Computer Division. "With this product, Apple hopes to learn more about the needs of this market."

USG, the US gypsum products group, said its third-quarter earnings before interest, taxes, depreciation, depletion, amortisation and other non-cash charges totalled \$65m, compared with \$44m last year, Reuter reports.

The company said it was reporting earnings on this basis due to a bankruptcy filing. USG emerged from bankruptcy on May 6 1993.

Net sales for the three

months rose to \$514m from \$474m in the same period a year ago.

On the same basis, earnings for the full nine months rose to \$165m from \$132m a year ago while net sales increased to \$1.42bn from \$1.34bn.

"The continuing improvement in our cash earnings for the third quarter is further evidence that the housing market has continued to recover and that USG has substantial operating leverage in the recovery phase of the economic cycle," said Mr Eugene Connolly, USG chairman.

USG's domestic operations results continued to be helped by growing residential construction and expanded repair and remodel activity.

Scotts to buy WR Grace subsidiary

SCOTTS, the US garden products group, is to acquire Grace-Sierra Horticultural Products for \$100m from a subsidiary of WR Grace, the specialty chemical group, and other investors, Reuter reports.

Scotts said that after the deal, Grace-Sierra's business and operations would be combined with Scotts' to form the world's largest turf and horticultural products company, with combined 1993 sales of nearly \$600m.

Grace-Sierra manufactures and markets specialty fertilisers for nursery, golf course,

greenhouse and consumer markets. The company said the acquisition would add significantly to sales growth and earnings potential through marketing efficiencies and cost reductions.

WR Grace said the deal included repayment of Grace-Sierra's indebtedness. It added that the deal was expected to be financed through a combination of long-term subordinated debt and bank borrowings.

Grace-Sierra was formed in 1989 by a combination of Sierra Chemical and the horticultural products business of WR Grace. It has worldwide sales of about \$115m.

Xerox sells investment bank

XEROX Financial Services of the US has completed the spin-off of its Furman Selz Holding to a group of Furman employees for \$99m in cash and junior subordinated debt, Reuter reports.

As part of the deal, a Xerox Financial affiliate will buy 9 per cent of the equity in the newly-formed company. Xerox said it will use the cash from the sale to pay off debt.

The spin-off is part of a step in Xerox's plan to get out of financial services and concentrate on the document processing business, the company said. Furman Selz is an international investment banking firm with 570 employees.

Western Digital to sell facility to Motorola

WESTERN Digital, the US semiconductor and disk drives group, is to sell its silicon wafer fabrication facility to Motorola, the US electronics group, for between \$112m and \$115m in cash, agencies report.

Motorola will also assume equipment leases associated with the facility. The deal will include other unspecified considerations. The transaction is expected to be completed by the end of December. Western Digital earlier this month terminated its negotiations on the sale of the facility.

The transaction with Motorola also involves a supply contract, under which Western Digital said it would obtain a significant portion of its silicon wafer requirements for its disk drive and microcomputer products businesses from Motorola for at least two years after the sale.

The sale is subject to a definitive agreement and government and private party approvals.

Once completed, the transaction will continue to fulfil one of our principal goals over the last year - meaningful reduction of bank debt as well as facilitate our transition to a variable-cost structure from a high-fixed-cost structure," said Mr Charles Haggerty, Western Digital chairman.

The Financial Times
plans to publish a survey on
Gloucestershire
on Friday, November 26

Published in Tokyo, New York, Frankfurt, Roubaix and London, it will be read by senior businessmen and government officials in 160 countries worldwide. It will also be of particular interest to the 139,000 senior businessmen in the UK who read the weekday FT*. If you wish to reach this important audience with your services, expertise or products whilst maintaining a high profile in connection with Gloucestershire, call:

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FT Surveys

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Survey 1202

ParMec

Invitation to present offers for 100% of the share capital of

Savio Caldaie Murali a Gas S.r.l.

ParMec S.p.A. ("ParMec"), formerly Savio S.p.A., based in Pordenone, Italy, with a fully paid-up share capital of Lire 50 billion, entered in the Companies Register in the Tribunal of Pordenone n. 8739, intends to receive and evaluate offers for the acquisition, by a single party, of 100% of Savio Caldaie Murali a Gas S.r.l. ("Savio Caldaie"). Savio Caldaie is a new company into which will be transferred the production of the wall mounted gas boilers and water heaters sited in Pordenone as well as the shareholding in Commercializzazione Termomobili S.p.A., the company which is responsible for the sales of these products.

The total turnover of the wall mounted gas boiler and water heater activities amounted to Lire 42.4 billion in 1992. The company's workforce is currently 75 employees.

In this transaction ParMec will be advised by M&A Società di Mergers & Acquisitions S.p.A., a wholly owned subsidiary of Swiss Bank Corporation. For any queries and explanations interested parties could refer to:

M&A Società di Mergers & Acquisitions S.p.A.
Via Manzoni, 43 - 20121 Milan - Italy
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Jonathan Gibson - Fabio Palumbo
Tel: (Int) 39-2-29002089 - Fax: (Int) 39-2-6599217

M&A Swiss Bank Corporation

This announcement is directed exclusively at limited liability companies. An information memorandum on Savio Caldaie will be sent to qualified interested parties who have requested in writing by letter or fax, to the address above, a copy of the confidentiality letter and returned it, together with a copy of their annual report and accounts for the last three years, a description of their activities and an indication of the industrial objectives of the potential acquisition, before 12 November 1993. Intermediaries of any kind are required to reveal the identity of their principals.

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Prices for electricity delivered to the premises of the electricity generating and supply companies in the UK, based on the following assumptions:

Year	Electricity	Gas	Oil	Coal
1990	10.00	10.00	10.00	10.00
1991	10.00	10.00	10.00	10.00
1992	10.00	10.00	10.00	10.00
1993	10.00	10.00	10.00	10.00
1994	10.00	10.00	10.00	10.00
1995	10.00	10.00	10.00	10.00
1996	10.00	10.00	10.00	10.00
1997	10.00	10.00	10.00	10.00
1998	10.00	10.00	10.00	10.00
1999	10.00	10.00	10.00	10.00
2000	10.00	10.00	10.00	10.00
2001	10.00	10.00	10.00	10.00
2002	10.00	10.00	10.00	10.00
2003	10.00	10.00	10.00	10.00
2004	10.00	10.00	10.00	10.00
2005	10.00	10.00	10.00	10.00
2006	10.00	10.00	10.00	10.00
2007	10.00	10.00	10.00	10.00
2008	10.00	10.00	10.00	10.00
2009	10.00	10.00	10.00	10.00
2010	10.00	10.00	10.00	10.00

Schlumberger

SCHLUMBERGER

THIRD QUARTER 1993 EARNINGS

New York, New York, October 21 - Schlumberger Limited announced today that net income was level with last quarter and 6% below one year ago as improving oilfield activity in North America offset weaker oilfield activity elsewhere. Earnings per share, at \$0.67, were level with last quarter but 7% below last year. Operating revenue, up 3% from last year but 4% below last quarter, was positively impacted by the acquisition of 50% of Dowell Schlumberger in January 1993. For the first nine months, operating revenue was up 6% while earnings were off 10% excluding an extraordinary item relating to the adoption of the new accounting standard for post-retirement benefits.

Driven by Wireline & Testing, Dowell, and Anadarko, our North America oilfield revenue advanced 44% on a comparable basis, while active drilling rigs increased 24% as natural gas prices firmed over last year. On the other hand, oilfield activity outside North America slipped, particularly in Europe and West Africa, where the results of our drilling and marine seismic activities were the most affected. Overall, drilling rig activity outside North America continued to drop as rig count was 9% lower than last year and 2% down from the second quarter of this year.

Measurement & Systems revenue was up 7% in national currencies but, due to the strengthening of the U.S. dollar by some 19% versus a basket of European currencies, revenue in U.S. dollars was off 7%. The rebound of Automatic Test Equipment continued as revenue was more than double that of one year ago.

The continuing decline in oil demand in the former Soviet Union coupled with slow economic conditions in Europe and Japan have caused world demand for oil to flatten after five years of increases. The resulting effect on the activity of our clients and, hence, on our oilfield business outside North America, is negative. According to Evan Baird, Chairman, "We remain convinced, however, that world oil demand will resume its upward climb in the near future, and will be accompanied by firmer oil prices, two conditions essential for our future growth."

ALLIANCE LEICESTER
Alliance & Leicester Building Society
£38,000,000
Subordinated Floating Rate
Notes due 1998

For the six months 21st October, 1993 to 21st April, 1994 the Notes will carry an interest rate of 6.2625% per annum with an interest amount of \$1,226.71 per £1,000,000 Note, payable on 21st April, 1994.

ABB International Finance B.V.
Can\$ 150,000,000
Collateral Floating Rate Notes due 2003

For the Interest Period 20th October, 1993 to 20th January, 1994 the Notes will carry a Rate of Interest of 6 per cent per annum. The Coupon Amount per Can\$ 1,000 Note will be Can\$ 15.12 and will be Can\$ 10,000. Notes will be Can\$ 151.23 payable on 20th January, 1994.

ALLIANCE LEICESTER
Alliance & Leicester Building Society
£13,000,000
Subordinated Floating Rate
Notes due 1998

For the six months 21st October, 1993 to 21st April, 1994 the Notes will carry an interest rate of 6.2625% per annum with an interest amount of \$1,226.71 per £1,000,000 Note, payable on 21st April, 1994.

Nationwide
£80,000,000
Subordinated Floating Rate
Notes due July 1998

For the three months 21st October, 1993 to 21st January, 1994 the Notes will carry an interest rate of 6% per annum with a coupon amount of GBP 160.65 per GBP 10,000 Note, payable on 21st January, 1994.

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INTERNATIONAL COMPANIES AND FINANCE

SIA profits fall 15% at halfway

By Kieran Cooke in Singapore

SINGAPORE Airlines (SIA), consistently one of the world's most profitable carriers, has reported a 15 per cent fall in its profits at the halfway point of the year. The company's profits fell to S\$423.5m (US\$259m) in the six months ending September 30, compared with pre-tax profits of S\$498m in the same period last year.

While SIA reported that turnover had increased by 10.3 per cent to S\$3.04bn, it said that intense competition had cut its profits and lowered revenue by S\$157m.

The airline said revenues were cut by a further S\$45m due to the strength of the Singapore dollar.

Mr Cheong Cheong Kong, SIA's managing director, said the airline was working in a very difficult business environment. "SIA's first-half profit was lower than a year ago but considering the performance of the competition, we did not do too badly," said Mr Cheong.

SA retailer up despite market weakness

By Philip Gwath in Johannesburg

PEPKOR, South Africa's largest mass-market retail group, increased attributable profit in the six months to August by 8 per cent to R45.7m (US\$14.5m), from R45m last year.

The markets in which Pepkor operates continue to be depressed with consumer confidence low, disposable income down and unemployment, especially in the market segments served by Pepkor, rising. Turnover, as a result, rose by only 2 per cent to R3.5bn. Margins, however, were maintained and operating profit was also 2 per cent higher at R56.9m.

Earnings per share rose by 5 per cent to 29 cents from 27.7 cents and the dividend was increased by 6 per cent to 8.5 cents per share. Mr Christo Wiese, chairman, said that barring political setbacks, he expected Pepkor to continue the earnings growth of the first six months for the remainder of the year.

A divisional breakdown of earnings shows that Pep, the clothing retailer that is the core of the group, suffered a 5 per cent fall in earnings. Pep's chain of Scottie's stores, known as Your More Store, is expected to break even in the second half of the year. Shoprite/Checkers, the food arm, continued rationalisation and expansion, with earnings rising by 7.7 per cent. Cashbuild increased earnings by 48 per cent and they rose by 19 per cent at Smart Centre.

Mr Wiese said Pepkor was in a consolidation phase following some large takeovers in recent years.

Constructing the new, modern Indonesia

Economic growth means a boom for property companies, reports William Keeling

IN West Jakarta, a newly constructed, garish pink shopping and hotel complex rises from the ground like a giant wedding cake. Designed to be visible from the passing toll-road, it is the showcase project of Ciputra Development, a leading Indonesian property company.

Indonesia, with a population of 190m, is the largest country among the fast-growing economies of south-east Asia. In common with its neighbours, two decades of economic success have resulted in a growing middle-class and a demand for modern retail outlets, offices and housing - and Indonesia's property companies are making the most of the good times.

Ciputra Development has announced plans to go public by the end of the year, raising \$20m and valuing the company at about \$500m. Brokers expect the issue to proceed smoothly. The Jakarta stock market has risen more than 60 per cent since December, and property companies have matched the index.

The six leading quoted property companies have a combined capitalisation of over Rp3,500bn (\$1.7bn), though much of that is rooted in faith. Companies are relied on future potential, not on the bricks and mortar in place.

still in the form of patchy fields, the estate is unlikely to be completed until 2004.

But plans for the 36 remaining hectares are incomplete and development is forecast to take 15 years.

Ciputra Development is little different. Its 455 hectare Citra Garden housing project is less than half complete, while its 500 hectare estate in Tangerang and 1,000 hectare housing project in Surabaya, East Java, are still in initial stages.

While the number of rival housing projects grows apace, Mr Hugh Obbard, managing director of property consultants First Pacific Davis Indonesia, believes "the demand for low to middle-cost housing is outstripping supply. The main surprise in the market has been the upper-income housing bracket continuing to perform so well". The steady lowering of interest rates this year bodes well, he says.

Ciputra Development claims two competitive advantages: the geographical spread of its 8.8m sq metre landbank around Java island, home to 60 per cent of Indonesia's population, and the reputation of Mr Ciputra, the company's founder and chairman.

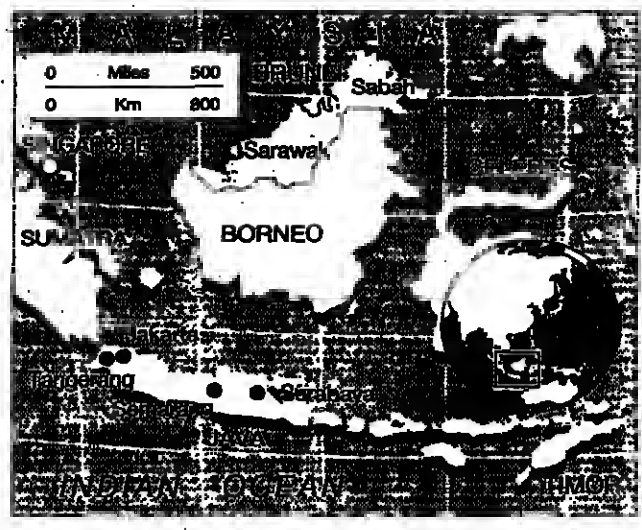
While most companies' landbanks are concentrated in Jakarta, Ciputra Development has highlighted the densely populated urban centres of Surabaya, with a 2.6m population, and Semarang, Central Java's capital with a 1.3m population, where the company is building a 20,500 sq metre shopping and hotel complex.

Mr Ciputra has more than 30 years' experience in property and Ciputra Development enjoys a 14 per cent share of Jakarta's housing market. Two other private companies in which Mr Ciputra is a large shareholder - Jaya Group and Metropolitan Group - hold a further 41 per cent share.

Mr Harun Hajar, director of Ciputra Development, says the three companies reduce costs through joint marketing activities, but adds that Mr Ciputra avoids favouring one company to the detriment of the others.

Brokers say Mr Ciputra is politically well-connected and packs a punch in Indonesia's golfing world - important for networking government officials.

The company forecasts a gross profit of Rp88bn on revenue of Rp242bn this year, rising to a profit of Rp161bn on revenue of Rp503bn in 1994. Brokers expect it to be a blue-chip property stock, but reserve their final endorsement until the issue is priced. The company is unlikely to be offered at a steep discount. Brokers say the anticipated price of Rp5,000 a share would value the company at about 18 times projected 1994 earnings.



Foster's accepts offer from Hudson Conway

By Nikki Tait in Sydney

FOSTER'S Brewing Group, the Australian brewer which owns Courage in the UK, yesterday announced that it had accepted an offer from Hudson Conway (HCL), a Victoria-based property group in which Mr Kerry Packer's Consolidated Press has an interest, to buy back and cancel shares owned by Foster's in HCL.

The offer is pitched at A\$3.50 a share. Foster's owns around 12.8m shares in Hudson Conway, which would net it approximately A\$45m (US\$30m).

In a statement to the Australian Stock Exchange, Hudson Conway - which is part of the consortium that recently won the right to build Melbourne's first casino - said the proposal was subject to shareholder approval at its annual meeting, scheduled for November, and confirmation by the Supreme Court of Victoria.

● CRA, the Australian mining house which is 49 per cent owned by RTZ Corporation, yesterday announced a series of top-level management changes, intended to ensure a smooth succession as members of current management retire.

The mining company said that Mr Leon Davis would succeed Mr John Ralph as chief executive of the company, when Mr Ralph retires next year. Mr Davis has been with CRA for 37 years and was second in command to Mr Ralph, CRA's long-standing chief executive, who is retiring later in 1994.

He will return to Melbourne in May, and fill the post of managing director and chief executive designate until Mr Ralph, CRA's long-standing chief executive, who is retiring later in 1994.

Correction

Hong Kong bonds

THE REPORT on the Hong Kong convertible bond market published in Friday's FT contained incorrect figures. The figures mentioned should have been US dollars, not Hong Kong dollars.

NEWS DIGEST

Paper groups report lower earnings, sales

TWO leading Japanese paper companies which merged this month reported declines in sales and profits as demand for paper was hit by the prolonged economic downturn, writes Nikko Terazono.

Kanzaki Paper and Oji Paper, which formed New Oji Paper on October 1, said their earnings were hit by a fall in paper prices due to oversupply.

Oji's non-consolidated pre-tax profits for the six months to September fell 7.5 per cent to Y5bn (\$46m) on a 4.9 per cent fall in sales to Y216bn. After-tax profits dropped 17.4 per cent to Y3.2bn. Sales of paper and pulp products fell 4.5 per cent to Y201bn, while processed paper products and lumber fell 5.2 per cent to Y215bn.

Kanzaki posted a 24 per cent fall in half-year pre-tax profits to Y78bn, while sales fell 9.6 per cent to Y64.2bn. After-tax profits rose 27.7 per cent to Y641m. Sales of its mainstay paper and pulp products fell 9.3 per cent to Y53.7bn.

For the full year to March, New Oji expects pre-tax profits of Y11bn on sales of Y46bn and an after-tax profit of Y6.7bn.

THE continuing slump in base metals prices has pushed Brisbane-based MIM Holdings to a first-quarter after-tax loss of A\$30.4m (US\$20.3m) in the 12 weeks to September 13, compared with a profit of A\$23m a year ago, writes Nikki Tait.

At the operating level, the international metals group saw an after-tax deficit of A\$6.9m, down from last time's profit of A\$4.5m. The final result was further depressed by A\$17.3m due to a write-off of cash contributed by MIM to its joint venture smelting operations in Germany.

The company said that sales volumes rose in some areas - 18 per cent higher for lead, 28 per cent for zinc, and 41 per cent for coal - although copper was down 10 per cent and gold by 24 per cent.

But base metals prices fell in Australian dollar terms, with zinc - down 38 per cent - showing the largest year-on-year decline.

Gold and silver prices were stronger, but total sales revenue for the quarter still slipped by 9 per cent.

First-quarter loss at MIM Holdings

THE continuing slump in base metals prices has pushed Brisbane-based MIM Holdings to a first-quarter after-tax loss of A\$30.4m (US\$20.3m) in the 12 weeks to September 13, compared with a profit of A\$23m a year ago, writes Nikki Tait.

Japanese second-tier brokers still suffering

By Emiko Terazono in Tokyo

SIX of Japan's 10 second-tier stockbrokers remained in the red in the first six months of the current fiscal year.

Daily average trading volume for the six months to September rose 58 per cent on the Tokyo stock exchange to Y408bn (\$3.77bn). However, trading has been dominated by institutional investors, and some smaller brokers which rely heavily on retail commissions did not benefit from the increase in trading activity.

Cost-cutting and a rise in brokerage commissions and bond trading profits helped New Japan Securities, Kokusai Securities, Wako Securities, and Tokyo Securities return to the black. Kokusai posted the largest pre-tax profit of Y4.7bn, against a pre-tax loss of Y7.2bn the previous year.

Pre-tax losses at the remaining six ranged from Y84m at Yamatase Securities to Y5.3bn at Kamikoku Securities.

On an after-tax basis, Cosmo Securities posted the largest loss of Y72m as it wrote off losses stemming from its "tobashi" deals, or manipulating investors' loss-making accounts.

Sanyo saw a pre-tax loss of Y5bn, while Okasan posted a pre-tax loss of Y1.4bn. Yamatase posted a loss of Y269m.

REPUBLIC OF ARGENTINA

THE MINISTRY OF ECONOMY AND PUBLIC WORKS AND UTILITIES

SECRETARIAT OF TRANSPORT

UNDERSECRETARIAT FOR PORTS AND NAVIGABLE WAYS

INVITATION FOR PUBLIC BID NR 6/93

"Concession of port Terminals at Puerto Nuevo, City of Buenos Aires Republic of Argentina"

REFERENCE: Reception of tenders and opening of envelope Nr. 1, are hereby adjourned to November 16, 1993 at 10.00 a.m., and shall be held at the Padilla Room of The Ministry of Economy and Public Works and Utilities, with address at Hipolito Yrigoyen 250, 5th floor, City of Buenos Aires, Republic Argentina.

PLACE TO ENQUIRE ABOUT AND WITHDRAW GENERAL BIDDING CONDITIONS:

Supply Manager's Office of ADMINISTRACION GENERAL DE PUERTOS S.E., with address at Esmeralda 55, 6th floor, Office 601, City of Buenos Aires, Republic of Argentina, on regular business days from 11.00 a.m. to 03.00 p.m.

VALUE OF GENERAL BIDDING CONDITIONS: \$10,000.00

BANK OF GREECE

US\$150,000,000

Floating rate notes 1994

Notice is hereby given that the rate of interest relating to the above issue has been fixed at 5.25 per cent for the period 26 October 1993 to 26 January 1994.

Interest accrued for the above period and payable on 26 April 1994 will amount to US\$134.17 per US\$10,000 note and US\$3,354.17 per US\$250,000 note.

Agent: Morgan Guaranty Trust Company JPMorgan

U.S. \$75,000,000

SWEDBANK

(Sparbankernas Bank)

Subordinated Floating Rate Notes due 1997

Notice is hereby given that for the first month of interest on the above issue, 1993 to January 26, 1994 the rate of interest will be 5.25% per annum. The interest payable on the relevant interest payment date, January 26, 1994 will be U.S. \$2,187.50 per U.S. \$250,000 note and U.S. \$546.88 per U.S. \$218.75 note. The sum of U.S. \$2,187.50 will be payable per U.S. \$250,000 principal amount of Registered Note.

By: The Chief Executive Officer, S.A. London, Agent

October 25, 1993

PETROBRAS

PETROLEO BRASILEIRO S.A.

INTERNATIONAL COMPETITIVE BIDDING NOTICE

BIDDING NOTICE N° 874-81-0023/93

Petrobras Brasileiro S.A. - PETROBRAS has received a loan in various currencies equivalent to US\$280 million from the World Bank, and intends to apply a portion of the proceeds of this loan to the execution of the services and the purchase of material and equipment for the erection of one Hydrotreatment Process Unit at Presidente Bernardes Refinery, in Cubatão - SP - Brazil.

This Bidding will be made under the rules of the World Bank and its purpose is the supply of the design, fabrication and erection of power Substations SE-5142 (expansion) of 138 kV, presently operating at 88 kV, and SE-5144 of 13.8 kV, which comprise the following main items of equipment:

- one (1) power transformer 138/88 - 13.8 kV, 15/20/25 MVA;
- four (4) power transformers 13.8/4, 16 kV, 3000 KVA;
- four (4) power transformers 13.8/0.48 kV, 1500 KVA;
- two (2) circuit-breakers 138 kV, 1250 A;
- two (2) medium voltage switchboards 13.8 kV;
- two (2) medium voltage switchboards 0.48 kV;
- two (2) motor control centers 4.16 kV;
- seven (7) motor control centers 0.48 kV;
- two (2) direct current systems;
- one (1) capacitor bank;
- others (lighting arresters, grounding resistors, bus ducts, oil immersed disconnect switches and frequency inverters).

Bids will be received until DEC. 7th/1993 at 3:00 p.m.

Interested BIDDERS, from eligible countries, members of the World Bank, Switzerland and Taiwan, China, who have designed, fabricated and erected at least three (3) power Substations with characteristics similar to those described above, besides complying with the other requirements provided with the Bidding Documents, may obtain this Bidding through the presentation of a bank deposit slip in the amount of a non-refundable fee of US\$ 500 (five hundred American dollars) to be made at Banco do Brasil S.A., Agência Centro - Rio de Janeiro (code 0001-9) current account n° 377-100-9 in the name of PETROBRAS/ADM, CENTRAL, or contact us at no expense at the following address: Petrobras Brasileiro S.A. - PETROBRAS Serviço de Material - SERMAT Av. República do Chile, 65, 6º andar - sala 682 Rio de Janeiro - RJ - Brazil CEP: 20035-900 Fone: (021) 534-1731 or 534-1745 Fax: (021) 534-3830 or 534-3837 Ref: Edital n° 874-023/93 AL: Coordenador da Comissão de Licitação

PIRELLI

THIS NOTICE IS IMPORTANT AND REQUIRES THE IMMEDIATE ATTENTION OF HOLDERS OF THE BONDS. IF HOLDERS ARE IN ANY DOUBT AS TO THE ACTION THEY SHOULD TAKE, THEY SHOULD CONTACT THEIR STOCKBROKER, LAWYER, ACCOUNTANT OR OTHER PROFESSIONAL ADVISER WITHOUT DELAY.

Pirelli Financial Services Company N.V. (the "Issuer")

US\$ 50,000,000 Guaranteed 7% Convertible Bonds 1995 ("the Bonds")

Conversion Right expiry date: 2nd December, 1993

Redemption Date: 10th December, 1993

Notice of Early Redemption

NOTICE IS HEREBY GIVEN to the holders of the Bonds (the "Bondholders") that pursuant to and in accordance with Condition 9(b) of the Bonds, the Issuer will on 10th December, 1993 (the "Redemption Date") redeem all of the Bonds then outstanding at their principal amount the "Redemption Price", together with interest accrued to the "Redemption Date".

Bondholders are reminded that, in accordance with Condition 13(a) of the Bonds, their right of conversion of the Bonds will terminate at the end of 2nd December, 1993 (being the eighth day prior to the Redemption Date). Prior to such time (and subject to the limitation on the exercise of the rights of conversion specified in Condition 13(a)), rights of conversion of the Bonds may be exercised by Bondholders delivering duly completed notices of conversion together with the Bonds to be converted (together with all unremitted coupons) to the specified office of any Conversion Agent listed below.

A sufficient number of Société Internationale Pirelli S.A. shares has been created to satisfy the Bondholders' right of conversion in full. Bondholders who wish to accept redemption of the Bonds by the Issuer at the Redemption Price (together with interest accrued to the Redemption Date) rather than exercise their rights of conversion should surrender the Bonds (together with all unremitted coupons) for payment in accordance with Condition 10 of the Bonds at the specified office of any Paying Agent listed below.

Bonds and Coupons will become void unless presented for payment within periods of ten and five years respectively from their respective Maturity Dates as defined in Condition 14 of the Bonds.

PRINCIPAL PAYING AND CONVERSION AGENT

Kreditbank S.A. Luxembourgbois 43 Boulevard Royal Luxembourg

PAYING AND CONVERSION AGENTS

Kreditbank N.V. Arenbergstraat 7 1000 Brussels

Swiss Bank Corporation Aeschenvorstadt 1 CH-4002 Basle

Kreditbank N.V. 40 Basinghall Street London EC2V 8DE

TO THE HOLDERS OF

SECOM

SECOM CO., LTD.

(the "Company")

¥30,000,000,000

2 per cent. Convertible Bonds 1998

(the "Bonds")

NOTICE OF REDEMPTION AT THE OPTION OF THE COMPANY

NOTICE IS HEREBY GIVEN pursuant to Conditions 5 (b) and 14 of the Terms and Conditions of the Bonds that the Company has determined to redeem on 20th December, 1993 (the "Redemption Date") all outstanding Bonds at the price of 103 per cent of the principal amount of the Bonds together with interest accrued to the Redemption Date.

Set out below is the relevant information.

Applicable 20 consecutive trading days:

From and including 21st September, 1993 to and including 20th October, 1993

Conversion price in effect on 20th October, 1993

¥45.392

The last reported selling price (regular way) of the Company's shares on the Tokyo Stock Exchange on 20th October, 1993

¥46.910

Aggregate principal amount of the Bonds outstanding as at 20th October, 1993

¥27,710,000,000

We would like to call your attention that, pursuant to Condition 4 (a) of the Bonds, the Bonds will not be converted after the close of business on 20th December, 1993.

SECOM CO., LTD.

Tokyo, Japan

By: The Mitsubishi Bank, Limited as Principal Paying Agent

20th October, 1993

LEGAL NOTICES

NOTICE TO CREDITORS TO SUBMIT CLAIMS

IN THE MATTER OF

RECEIPTS LIMITED

(the Members Voluntary Liquidation)

IN THE MATTER OF

THE INSOLVENCY ACT 1986

NOTICE IS HEREBY GIVEN that the Chairman of the above-named Company, which is being voluntarily wound up, is invited, on or before the 30th day of November 1993, to send in to the Liquidator a statement of its claims and, if it is a creditor, to send in to the Liquidator a statement of its claims and, if it is a creditor, to send in to the Liquidator a statement of its claims and, if it is a creditor, to send in to the Liquidator a statement of its claims.

IN THE MATTER OF

THE COMPANIES ACT 1985

NOTICE IS HEREBY GIVEN that the Order of the High Court of Justice, Chancery Division, dated Wednesday 13th October 1993, appointing (a) the receiver of the assets of the above named Company, from 23.922.175.40 to 23.922.175.40 and (b) the receiver of the assets of the above named Company, from 23.922.175.40 to 23.922.175.40, is hereby confirmed by the Court. Dated this 21st day of October 1993.

COMMERCIAL PROPERTY

This section appears every Friday in the Financial Times.

For advertising details or for further information, please contact Mark Hall-Smith on 071 673 3211

COMMERZBANK

NOTICE TO HOLDERS OF LONDON DEPOSIT CERTIFICATES ("LDCs")

NOTICE IS HEREBY GIVEN that in accordance with the notice dated 8th April, 1993 and in accordance with Condition (P) of the LDCs, the Depositary has sold all remaining held shares.

Holders are therefore asked to surrender their LDCs at the offices of the Depositary and will receive in exchange proceeds amounting to £26.49 per LDC unit presented.

Certificates should be lodged with the Depositary at the following address:

S.G. Warburg & Co. Ltd. Paying Agency, 2 Finsbury Avenue, London EC2M 2PA

26th October, 1993

COMMERZBANK

AKTIENOBELLEGHAF

PREQUALIFICATION

With a view to creating a company, to co-ordinate the use of the kWh as a currency for advance payment for the construction or modernisation of electric power plants, and for the reconstruction of those existing plants which pose high risks to the environment and to the health of populations,

EUROWATT-COMMERCE

Société Commerciale Communautaire Européenne pour l'Energie Electrique S.A.

Avenue Louise, 95 - 1050 BRUXELLES

Invites western and eastern companies which specialise in arranging financial packages to submit documentation, giving details of their specific background in the economic and financial sectors.

Selected applicants will be invited for negotiations, before being asked to submit proposals for the first phase of this operation, which involves a feasibility study on the establishment of this company.

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COMMODITIES AND AGRICULTURE

Tin hopes boosted as China comes into fold

By Kenneth Gooding,
Mining Correspondent

CHINA, THE world's biggest tin producer, is joining the Association of Tin Producing Countries and analysts suggested yesterday that this should improve the ATPC's chances of curbing supply and raising prices.

"This must be good for those who want tin prices to go up. China coming into the fold will help the ATPC exert more restraint on supply," said Mr. Neil Buxton, analyst at Metal Bulletin Research.

He suggested that China was mainly responsible for this year's rise in world tin stocks to about 40,000 tonnes, 13 or 14 weeks supply. Available statistics suggest that China lifted annual exports from about 10,000 tonnes at the beginning of the 1990s to between 30,000 and 35,000 tonnes - roughly 20 per cent of the 175,000 tonnes consumed each year in the western world.

Western tin producers had cut output much more than other base metals companies, by about 20 per cent over the past two years, Mr. Buxton pointed out. "These cuts were completely offset by exports

from China and, to a lesser extent, from other smaller, far east Asian countries such as Vietnam and Laos."

Although China had informally agreed export restrictions with the ATPC, this obviously had not worked well, Mr. Buxton pointed out. China's full membership of the ATPC would put more pressure on it to keep its promises.

The news about China from a two-day ATPC meeting this week in Kuala Lumpur did not stop tin prices falling sharply again yesterday, a reaction to the recent, equally sharp, rise. The spectre of increasing stocks drove down the tin price to a 20-year low of \$4,350 a tonne early in September but it then bounced back to touch \$5,053 last Thursday amid suggestions that it was being manipulated upwards in the Kuala Lumpur market by merchants and producers.

Tin for delivery in three months fell another \$207.50 to close at \$4,797.50 last night. Ms. Karen Norton, analyst at Billiton-Enthoven Metals, part of the Royal Dutch/Shell group, said recent higher tin prices were not fundamentally justified. "And our technical analyst says tin was overbought

and due for a sharp [downward] correction." Ms. Norton believed China's decision to join the ATPC was "a positive move in the longer term".

China set conditions before it agreed to join. It wanted to be exempted from providing monthly tin market statistics on the grounds that there are no sources from which it could obtain the data. It also insisted that its membership payment be based on exports, not production as is the case for other countries, as its domestic market consumed a great deal of its output.

Other members of the ATPC are Australia, Bolivia, Indonesia, Malaysia, Nigeria, Thailand and Zaire. Brazil, the second-largest producer, has indicated it may join next year.

The ATPC wanted 1993 exports restricted to 39,400 tonnes compared with 37,031 in 1992 in the belief that this would cut world stocks from about 39,000 tonnes to 20,000 tonnes by the end of this year. Failure to meet these targets has split opinion within the ATPC about whether the so-called supply rationalisation scheme should be continued and even whether the organisation should be disbanded.

Chips are down for UK potato monopoly

The marketing board's stay of execution could yet turn into a permanent reprieve

H AD MR John Gummer

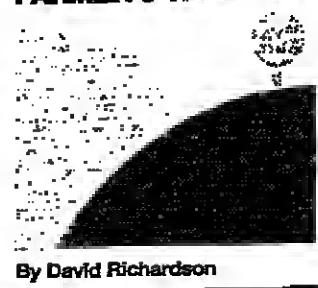
still been Minister of Agriculture, you might, by now, have read about the UK Potato Marketing Board in the obituary columns. Like its milk marketing counterpart, the PMB enjoys monopoly status and this, together with its statutory powers to control the area of potatoes planted, fail to match the co-operative and competitive pattern for the marketing of farm commodities set by the EC Commission in Brussels.

Brussels-based bureaucrats have been gunning for all such UK institutions since Britain joined the community in 1973. Since then the marketing boards for eggs, hops and wool have been wound up. Those for milk and potatoes were bigger, stronger and had more staying power. But in recent years EC administrators once again increased the pressure for something to be done about them; and in Mr. Gummer they found an ally.

He initiated winding up procedures for both the milk and potato boards. That for milk has already gone beyond the point of no return and April 1 1994 is the target date for completion of the process. But although it had long been assumed that the PMB would follow the milk into oblivion, the appointment in May of Mrs. Gillian Shephard as minister of agriculture led to a stay of execution.

As a farmer's daughter Mrs. Shephard no doubt absorbed the stabilising advantages of the PMB for both farmers and consumers during her Norfolk

FARMER'S VIEWPOINT



By David Richardson

childhood. Indeed one of her first actions when she arrived at the Ministry of Agriculture was to announce a delay in the winding up of the potato board and a review of the entire marketing scheme.

In essence she challenged all sectors of the potato industry - growers, processors and retailers - to get together and come up with an acceptable alternative scheme. By implication it would need to retain the important feature of promoting price stability while at the same time satisfying the demands of the EC and the UK government in their ambitions to expose the potato industry to the rigours of the market place.

Last week the minister received the response of the potato industry. For the first time ever growers, merchants, processors and retailers came up with a joint agreed proposal. In itself it is remarkable because in the past they have been poles apart. Growers, as represented by the NFU and the farmer members of the PMB, have called for the continuation of statutory control

while the trade has consistently insisted on a totally free market.

This new plan, which the Mrs. Shephard is now considering, contains several key points. The first and most crucial is that statutory area control be partially relaxed. It proposes that the national quota area of potatoes should be set annually, as at present, by the joint consultative council, a subcommittee of the PMB containing a majority of users and consumers. But rather than setting a strictly controlled area for each farm, which must at present be observed if a grower is to avoid a fine for over-planting or risk losing some entitlement to grow potatoes if he under-plants, the plan proposes 5 per cent flexibility either way.

The concept is based on experience in other potato growing countries where there are no statutory area controls. A study of fluctuations in acreage following profitable and unprofitable potato years in such countries has revealed that there is seldom more than 10 per cent difference in the area grown. It is therefore argued that 5 per cent either side of a target area would allow the potato market to operate while at the same time avoiding vast surpluses or shortages.

Meanwhile the machinery of quotas would be maintained in case, in a few years' time, the EC were to decide that as for milk, sheep and sugar beet, Community quotas for potatoes were also necessary. Another fundamental aspect

to the joint proposals is that producer funded intervention in the potato market be discontinued. In the past the PMB has had the right and the duty to buy surplus potatoes in years of oversupply and sell them at a considerable loss for feeding to livestock.

The cash to fund this expensive operation has come, in recent years, from grower levies of some £85 a hectare. In the distant past the government also made a contribution. The new proposal suggests that, as with area quotas, the intervention legislation remains in place but that for the foreseeable future it is not used. This in turn would allow the area levy paid by growers to be halved with most of the reduced revenue being used for uncontroversial but important matters such as market promotion and technical research.

The new levy would correspond closely with similar schemes in other EC countries and amount to about £1 for each tonne of potatoes grown. It is also proposed that the size of the board to run the new scheme should be drastically reduced. At present the PMB consists of 22 members. A few years ago there were 33. It is now proposed that the number be cut to a more workable eight. Surprisingly perhaps, this may be more difficult for some growers to swallow than the more fundamental proposals.

For many farmers are wedded to the illusion of regional representation, even though the statutory duty of board members is to run the present

marketing scheme efficiently. Representation is, and always has been, the job of the National Farmers' Union.

Even so the fact that the plan is agreed by all parties involved should give it a head start. And the modest amount of production and price stability it should provide may help to maintain UK potato consumption at the top of the EC league.

Advocates of the present board's activities have always claimed that this consumption record is directly related to the relatively stable prices paid for potatoes by UK consumers for many years. It is argued that price volatility cuts consumption, even in countries, like Holland, where potatoes are an even more important crop.

The authors of the new plan are convinced that it will prove acceptable to Brussels; that the administrators there will recognise that it would lead to a less intrusive scheme than that currently operated by the PMB and that they may even sanction the adoption of something similar in other EC countries where volatility in potato markets is the rule rather than the exception.

Given Mrs. Shephard's recent pronouncements on the need to develop markets and to make it more attractive for UK consumers to buy more UK produced food, together with her encouragement for farmers to collaborate more with processors and retailers, there would appear to be no logical reason for her not to accept the proposals. It is rumoured that she will do just that very soon.

Australian miners have second thoughts on land legislation

By Nikki Tait in Sydney

THE AUSTRALIAN mining industry, which last week expressed qualified backing for the federal government's "Mabo" Aboriginal land rights legislation, yesterday sounded a less optimistic note, saying that the package could discourage investment and might fail to validate all previous land titles as the commonwealth had promised.

Mr. Geoff Ewing, the Australian Mining Industry Council's assistant director, said yesterday it was "not apparent from the details so far available that all past titles will be fully secured, and therefore not

affected by native title as the prime minister stated."

"The proposals for the approval of future grants still leave open the possibility of both the commonwealth and states each being involved in the process, and the time limits for completion of the process have been significantly extended," he added.

"It also appears at this stage that consideration of native title, which could take as long as 20 months, will have to precede other approval processes which themselves take a considerable time."

The draft legislation has yet to be unveiled and all commentators are at present basing

opinions on the public statements made by Mr. Paul Keating, the prime minister, and other government officials. Last week, it appeared that Mr. Keating had scored a political triumph by hammering out a land rights package that had at least qualified support from most interested parties.

The need for legislation has been pressing in the wake of a high court decision last year that did away with the notion that Australia was uninhabited before European settlement. It said that native title claims could succeed where there had been close and continuing association with the land in question.

US gives assurance on barley subsidy

By Nikki Tait

US OFFICIALS have assured Mr. Don Russell, Australia's ambassador to the US, that they will act consistently with President Bill Clinton's undertaking to protect Australia from any negative effects of the Export Enhancement Programme.

Last week, Australia protested that the US had allocated 100,000 tonnes of subsidised malted barley to China under the EEP for 1993-94. China, which was not previously included in EEP barley allocations, represents the most important malted barley export market for Australian growers.

Mr. Tony Lake, President Clinton's national security adviser, told Mr. Russell that the US recognised that China was a sensitive and major market for Australian exports of malted barley. However, he also pointed to unfair EC marketing in China, an Australian Embassy statement issued in Washington said.

E German energy investment programme under gas cloud

By Judy Dempsey in Schwerte, Brandenburg

THE FIRST phase of a massive investment programme in eastern Germany's brown coal-based energy sector began yesterday amid growing concerns that more cities in the region will switch to gas.

Verenigte Energiewerke, or Veag, eastern Germany's major utility company, started construction of a DM5bn (£2bn) power generating block at Schwerte in the eastern state of Brandenburg, which will be fuelled by brown coal. The plant, which will have a capacity of 600MW, is part of a long-term investment programme totalling DM46bn and spread over ten years.

Consumption of brown coal has since fallen below 50 per cent because of the collapse of the region's manufacturing base, and the workforce has been reduced to 55,000.

Both Veag and Laubag, eastern Germany's largest brown coal producer, which is the main supplier to Veag, estimates that the region must consume 55m tonnes of coal a year to secure the economic viability of both companies.

However, several cities, most notably Potsdam, the state capital of Brandenburg, earlier this month voted to switch from brown coal to gas. Veag officials yesterday said they were concerned that this would set a precedent for other cities, including neighbouring Cottbus, and G6rlitz. In Saxony, which are also considering a switch to gas.

Potsdam's decision means a loss of 1m tonnes of brown coal. If this trend continues, Veag may decide not to build a new 800MW power plant at Boxberg, in Saxony. This would rob Laubag of a further 10m tonnes. And unless there was a sharp rise in the eastern German industrial sector the viability of Veag and Laubag could be undermined.

Oil traders interviewed

THE OFFICE of Fair Trading yesterday revealed that officers from the US Department of Justice had been interviewing traders with London-based oil companies, Reuters reports.

Market reports said several companies were being interviewed by US investigators after some traders in August 1992 cut brokers' commissions. An OFT official confirmed that it sat in as an observer at talks last week in London between the Justice Department and some trading companies, although no British investigation was under way. The office is the UK authority to investigate allegations of anti-competitive behaviour.

The official would not name the companies involved or what issues were raised by the Justice Department.

Trade sources said that some companies last year informed oil brokers in Britain, the US and Singapore that commission paid to them on account of crude oil trading would be

cut by 30 per cent. Commissions were cut from 0.5 cents a barrel to 0.35 cents on trade in the North Sea Brent forward or 15-day paper market. Brokers at the time said they felt that they had no option than to agree to lower commission rates.

At least one brokerage company might be seeking financial compensation, brokers said. One broker, who refused to be identified, said any compensation could run to millions of dollars.

Crude oil prices fell yesterday, extending a sell-off that began late last week against a background of concern about weak world demand. December futures for the benchmark Brent Blend sank to \$16.57 per barrel during London's afternoon trading session, down from a close last Friday of \$16.85.

Prices, which fell 20 per cent earlier in the year, had until late last week seemed more stable.

WORLD COMMODITIES PRICES

MARKET REPORT

The GOLD price bounced back above the \$370-a-ounce mark at the London bullion market yesterday following the sharp fall at the end of last week. As the price moved up \$3.75 to \$371.75 an ounce dealers said most of the interest came from professionals who had been caught short by the late bounce on Friday evening at the New York Commodity Exchange (Comex). Some encouragement was also taken from the market holding above \$365 throughout last week. SILVER prices were only marginally higher but PLATINUM gained \$4.60 to \$376.35 an ounce in light trading.

London Markets

SPOT MARKETS
Crude oil (per barrel FOB) +0.05
Dubai \$14.34-4.44 0.40
Brent Blend (dated) \$16.01-6.00 0.40
Brent Blend (Dec) \$16.43-6.45 0.40
WTI (1 Jan est) \$17.29-7.29 0.55

Oil products
(NWE prompt delivery per tonne CIF +0.05)
Premium Gasoline \$189-189 -3.5
Gas oil \$169-169 -4.5
Heavy fuel oil \$61-61
Naphtalene \$167-167 -2.5
Petrolium Argus Estimates

Other
Gold (per troy oz) \$371.75 +3.75
Silver (per troy oz) \$445.50 +1.0
Platinum (per troy oz) \$376.35 +4.6
Palladium (per troy oz) \$131.10 +1.1

Copper (US Producer) 84.50
Lead (US Producer) 38.50
Tin (plum) (Lump market) 12.40m
Tin (New York) 22.00
Zinc (US Prime Western) 1.00

Grains (live weight) 121.20p
Sheep (live weight) 80.45p
Pigs (live weight) 67.14p
London daily sugar (raw) \$206.3
London daily sugar (white) \$208.0
Tale and Lyle export price \$220.5

Barley (English feed) 1.00
Maize (US No. 3 yellow) 1.00
Wheat (US No. 2 Northern) 1.00

Rubber (Nov) 61.20p
Rubber (Dec) 61.50p
Rubber (Jan) 61.80p
Cocoa (US Philadelphia) \$437.50
Peanut (US Philadelphia) \$237.50
Cocoa (Singapore) \$186.00
Cotton (US index) \$44.00
Wool (US Super) \$37.00

Buying of the white metal had been noted towards the close at the Tokyo Commodity Exchange. "The fundamentals haven't changed but the market and its charts are both positive," one London dealer commented. At the London Commodity Exchange COFFEE futures ended in the middle of the day's range after being trimmed back by technical selling in New York. COCOA prices ended closer to the highs, but dealers said conditions were dull, with total turnover amounting to only 2,117 lots (10 tonnes each).

Compiled from Reuters

CRUDE OIL - \$/bbl
Latest Previous High/Low
Dec 16.40 16.85 18.37
Jan 16.51 17.05 17.05 16.59
Feb 16.75 17.20 17.19 16.75
Mar 16.85 17.27 17.27 16.85
Apr 17.02 17.34 17.34 17.02
May 17.20 17.47 17.47 17.20
Jun 17.30 17.59 17.59 17.30
Jul 17.40 17.69 17.69 17.40
Aug 17.45 17.69 17.69 17.45
Sep 17.45 17.69 17.69 17.45
Turnover: 294,033 (103,000)

GAS OIL - \$/bbl
Latest Previous High/Low
Dec 16.40 16.85 18.37
Jan 16.51 17.05 17.05 16.59
Feb 16.75 17.20 17.19 16.75
Mar 16.85 17.27 17.27 16.85
Apr 17.02 17.34 17.34 17.02
May 17.20 17.47 17.47 17.20
Jun 17.30 17.59 17.59 17.30
Jul 17.40 17.69 17.69 17.40
Aug 17.45 17.69 17.69 17.45
Sep 17.45 17.69 17.69 17.45
Turnover: 294,033 (103,000)

SUGAR - \$/cwt
White Close Previous High/Low
Dec 282.30 282.50 282.60 278.50
Jan 279.00 279.00 280.00 277.00
Mar 281.40 281.40 282.70 281.50
Turnover: 482 (1298) (103,000) (103,000)
Dec 1657.07 Mar 1657.27

WHEAT - \$/bushel
Latest Previous High/Low
Dec 10.75 10.75 10.75 10.75
Jan 10.75 10.75 10.75 10.75
Feb 10.75 10.75 10.75 10.75
Mar 10.75 10.75 10.75 10.75
Apr 10.75 10.75 10.75 10.75
May 10.75 10.75 10.75 10.75
Jun 10.75 10.75 10.75 10.75
Jul 10.75 10.75 10.75 10.75
Aug 10.75 10.75 10.75 10.75
Sep 10.75 10.75 10.75 10.75
Turnover: 100,775 100,850
Jan 102.80 103.00
Turnover: 133 (268)

NO. 1 RAW SUGAR - \$/cwt
Latest Previous High/Low
Mar 10.47 10.73
Jul 11.16 11.24
Oct 10.99 11.07
Turnover: 22 (40) lots of 50 tonnes.

COCOA - \$/tonne
Close Previous High/Low
Dec 942 938 943 933
Jan 911 905 912 905
Mar 975 974 976 970
Jul 978 975 979 972
Sep 978 975 979 972
Dec 967 959 960 954
Mar 968 958 969 955
Turnover: 2117 (7382) lots of 10 tonnes
ICO indicator prices (\$/tonne per pound) for Oct 22
Comp. daily 92.18 (92.01) 10 day average 92.17 (92.01)

POTATOES - \$/tonne
Close Previous High/Low
Mar 115.0 115.0
Apr 97.3 89.5 87.5 94.5
May 103.0 102.8 100.0
Turnover: 101 (108) lots of 20 tonnes.

FREIGHT - \$/tonne
Close Previous High/Low
Oct 1282 1323 1323 1325
Nov 1285 1285 1310 1285
Dec 1292 1295 1310 1290
Jan 1315 1320 1330 1315
Apr 1340 1345 1360 1345
Jul 1155 1165 1200 1200
Oct 1380 1380
Jan 1370 1380 1370
Apr 1331 1341 1331
Turnover: 133 (268)

GRAIN - \$/bushel
Wheat Close Previous High/Low
Nov 97.50 96.50 96.50 96.00
Jan 100.15 100.70 100.80 100.50
Mar 102.10 102.50 102.60 102.00
Apr 103.85 104.30 105.00 103.75
May 103.85 104.30 105.00 103.75
Jun 103.85 104.30 105.00 103.75
Jul 103.85 104.30 105.00 103.75
Aug 103.85 104.30 105.00 103.75
Sep 103.85 104.30 105.00 103.75
Turnover: 100,775 100,850
Jan 102.80 103.00
Turnover: 133 (268)

CRUDE OIL - \$/bbl
Latest Previous High/Low
Dec 16.40 16.85 18.37
Jan 16.51 17.05 17.05 16.59
Feb 16.75 17.20 17.19 16.75
Mar 16.85 17.27 17.27 16.85
Apr 17.02 17.34 17.34 17.02
May 17.20 17.47 17.47 17.20
Jun 17.30 17.59 17.59 17.30
Jul 17.40 17.69 17.69 17.40
Aug 17.45 17.69 17.69 17.45
Sep 17.45 17.69 17.69 17.45
Turnover: 294,033 (103,000)

LONDON METAL EXCHANGE
(Prices supplied by Amalgamated Metal Trading)
Close Previous High/Low AM Official
Aluminium 92.7% purity 1094.46 1094.46 1115.2.0 1115.2.0
Copper 1091.2 1091.2 1115.15.5 1115.15.5
Gold 1091.2 1091.2 1115.15.5 1115.15.5
Silver 1091.2 1091.2 1115.15.5 1115.15.5
Zinc 1091.2 1091.2 1115.15.5 1115.15.5
Lead 1091.2 1091.2 1115.15.5 1115.15.5
Tin 1091.2 1091.2 1115.15.5 1115.15.5
Nickel 1091.2 1091.2 1115.15.5 1115.15.5
Cadmium 1091.2 1091.2 1115.15.5 1115.15.5
Cobalt 1091.2 1091.2 1115.15.5 1115.15.5
Manganese 1091.2 1091.2 1115.15.5 1115.15.5
Selenium 1091.2 1091.2 1115.15.5 1115.15.5
Vanadium 1091.2 1091.2 1115.15.5 1115.15.5
Molybdenum 1091.2 1091.2 1115.15.5 1115.15.5
Chromium 1091.2 1091.2 1115.15.5 1115.15.5
Iron 1091.2 1091.2 1115.15.5 1115.15.5
Steel 1091.2 1091.2 1115.15.5 1115.15.5
Copper 1091.2 1091.2 1115.15.5 1115.15.5
Silver 1091.2 1091.2 1115.15.5 1115.15.5
Gold 1091.2 1091.2 1115.15.5 1115.15.5
Platinum 1091.2 1091.2 1115.15.5 1115.15.5
Palladium 1091.2 1091.2 1115.15.5 1115.15.5
Rhodium 1091.2 1091.2 1115.15.5 1115.15.5
Iridium 1091.2 1091.2 1115.15.5 1115.15.5
Osmium 1091.2 1091.2 1115.15.5 1115.15.5
Ruthenium 1091.2 1091.2 1115.15.5 1115.15.5
Cobalt 1091.2 1091.2 1115.15.5 1115.15.5
Manganese 1091.2 1091.2 1115.15.5 1115.15.5
Selenium 1091.2 1091.2 1115.15.5 1115.15.5
Vanadium 1091.2 1091.2 1115.15.5 1115.15.5
Molybdenum 1091.2 1091.2 1115.15.5 1115.15.5
Chromium 1091.2 1091.2 1115.15.5 1115.15.5
Iron 1091.2 1091.2 1115.15.5 1115.15.5
Steel 1091.2 1091.2 1115.15.5 1115.15.5
Copper 1091.2 1091.2 1115.15.5 1115.15.5
Silver 1091.2 1091.2 1115.15.5 1115.15.5
Gold 1091.2 1091.2 1115.15.5 1115.15.5
Platinum 1091.2 1091.2 1115.15.5 1115.15.5
Palladium 1091.2 1091.2 1115.15.5 1115.15.5
Rhodium 1091.2 1091.2 1115.15.5 1115.15.5
Iridium 1091.2 1091.2 1115.15.5 1115.15.5
Osmium 1091.2 1091.2 1115.15.5 1115.15.5
Ruthenium 1091.2 1091.2 1115.15.5 1115.15.5
Cobalt 1091.2 1091.2 1115.15.5 1115.15.5
Manganese 1091.2 1091.2 1115.15.5 1115.15.5
Selenium 1091.2 1091.2 1115.15.5 1115.15.5
Vanadium 1091.2 1091.2 1115.15.5 1115.15.5
Molybdenum 1091.2 1091.2 1115.15.5 1115.15.5
Chromium 1091.2 1091.2 1115.15.5 1115.15.5
Iron 1091.2 1091.2 1115.15.5 1115.15.5
Steel 1091.2 1091.2 1115.15.5 1115.15.5
Copper 1091.2 1091.2 1115.15.5 1115.15.5
Silver 1091.2 1091.2 1115.15.5 1115.15.5
Gold 1091.2 1091.2 1115.15.5 1115.15.5
Platinum 1091.2 1091.2 1115.15.5 1115.15.5
Palladium 1091.2 1091.2 1115.15.5 1115.15.5
Rhodium 1091.2 1091.2 1115.15.5 1115.15.5
Iridium 1091.2 1091.2 1115.15.5 1115.15.5
Osmium 1091.2 1091.2 1115.15.5 1115.15.5
Ruthenium 1091.2 1091.2 111

HOTELS & LEISURE - Cont.

HOTELS & LEISURE - CONE
+ 05

WINE - Can

Figure 1

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OFFSHORE INSURANCES

مكتبة الامم المتحدة

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CURRENCIES, MONEY AND CAPITAL MARKETS

FOREIGN EXCHANGE

Pound rises on rate cut doubts

THE pound gained against the D-Mark and dollar as an element of doubt emerged over an early cut in UK interest rates and other currencies settled following the volatility of last week, writes Peter John.

But most of yesterday's moves reflected adjustment of trading positions rather than heavy shifts of money and economists were wary of giving them too much importance. Economic data on Friday had suggested the UK economic recovery was still on track. This prompted coverage in the weekend press arguing that a UK rate cut was less necessary than previously thought. The comment gave an additional lift to a pound already helped by selling of the D-Mark and the dollar.

The German currency was weaker in the aftermath of the Bundesbank's surprise rate reduction last Thursday. Many investors feel the Bundesbank might have signalled a shift in monetary policy and be more prepared to ease rates again. That view was slightly joined when the west German state of Baden-Württemberg announced a 0.3 rise in the cost of living in the month to mid-October, giving a year-on-year rise of 4.1 per cent. Most econo-

mists had hoped for a lower figure. Nevertheless, short-term investors had built up large holdings of D-Marks during the recent speculative selling of the French and Belgian francs and the movement of those holdings is likely to take some time.

By the close of European dealing, sterling was up two pence against the D-Mark at DM2.4890.

The dollar saw some correction after its six-penny rise against the D-Mark last week and was sold down a penny after the release of the Baden-Württemberg figures. It rallied later to close at DM1.6738 to the D-Mark, down from Friday's DM1.6750. Against the pound, it ended the day at \$1.4860, down from \$1.4730.

US home sales climbed in September to a seasonally-adjusted annual rate of 3.91m, the highest level this year, but economists are waiting for

FINANCIAL FUTURES AND OPTIONS

ESTIMATED VOLUME: 100,000 CONTRACTS

Strike	Call	Put	Settlement
112	2.52	0.08	0.08
113	2.05	0.18	0.17
114	1.22	0.32	0.32
115	0.48	0.58	0.58
116	0.18	0.88	0.88
117	0.08	1.18	1.18
118	0.05	1.48	1.48
119	0.02	1.78	1.78
120	0.01	2.08	2.08
121	0.01	2.38	2.38
122	0.01	2.68	2.68
123	0.01	2.98	2.98
124	0.01	3.28	3.28
125	0.01	3.58	3.58
126	0.01	3.88	3.88
127	0.01	4.18	4.18
128	0.01	4.48	4.48
129	0.01	4.78	4.78
130	0.01	5.08	5.08
131	0.01	5.38	5.38
132	0.01	5.68	5.68
133	0.01	5.98	5.98
134	0.01	6.28	6.28
135	0.01	6.58	6.58
136	0.01	6.88	6.88
137	0.01	7.18	7.18
138	0.01	7.48	7.48
139	0.01	7.78	7.78
140	0.01	8.08	8.08
141	0.01	8.38	8.38
142	0.01	8.68	8.68
143	0.01	8.98	8.98
144	0.01	9.28	9.28
145	0.01	9.58	9.58
146	0.01	9.88	9.88
147	0.01	10.18	10.18
148	0.01	10.48	10.48
149	0.01	10.78	10.78
150	0.01	11.08	11.08
151	0.01	11.38	11.38
152	0.01	11.68	11.68
153	0.01	11.98	11.98
154	0.01	12.28	12.28
155	0.01	12.58	12.58
156	0.01	12.88	12.88
157	0.01	13.18	13.18
158	0.01	13.48	13.48
159	0.01	13.78	13.78
160	0.01	14.08	14.08
161	0.01	14.38	14.38
162	0.01	14.68	14.68
163	0.01	14.98	14.98
164	0.01	15.28	15.28
165	0.01	15.58	15.58
166	0.01	15.88	15.88
167	0.01	16.18	16.18
168	0.01	16.48	16.48
169	0.01	16.78	16.78
170	0.01	17.08	17.08
171	0.01	17.38	17.38
172	0.01	17.68	17.68
173	0.01	17.98	17.98
174	0.01	18.28	18.28
175	0.01	18.58	18.58
176	0.01	18.88	18.88
177	0.01	19.18	19.18
178	0.01	19.48	19.48
179	0.01	19.78	19.78
180	0.01	20.08	20.08
181	0.01	20.38	20.38
182	0.01	20.68	20.68
183	0.01	20.98	20.98
184	0.01	21.28	21.28
185	0.01	21.58	21.58
186	0.01	21.88	21.88
187	0.01	22.18	22.18
188	0.01	22.48	22.48
189	0.01	22.78	22.78
190	0.01	23.08	23.08
191	0.01	23.38	23.38
192	0.01	23.68	23.68
193	0.01	23.98	23.98
194	0.01	24.28	24.28
195	0.01	24.58	24.58
196	0.01	24.88	24.88
197	0.01	25.18	25.18
198	0.01	25.48	25.48
199	0.01	25.78	25.78
200	0.01	26.08	26.08
201	0.01	26.38	26.38
202	0.01	26.68	26.68
203	0.01	26.98	26.98
204	0.01	27.28	27.28
205	0.01	27.58	27.58
206	0.01	27.88	27.88
207	0.01	28.18	28.18
208	0.01	28.48	28.48
209	0.01	28.78	28.78
210	0.01	29.08	29.08
211	0.01	29.38	29.38
212	0.01	29.68	29.68
213	0.01	29.98	29.98
214	0.01	30.28	30.28
215	0.01	30.58	30.58
216	0.01	30.88	30.88
217	0.01	31.18	31.18
218	0.01	31.48	31.48
219	0.01	31.78	31.78
220	0.01	32.08	32.08
221	0.01	32.38	32.38
222	0.01	32.68	32.68
223	0.01	32.98	32.98
224	0.01	33.28	33.28
225	0.01	33.58	33.58
226	0.01	33.88	33.88
227	0.01	34.18	34.18
228	0.01	34.48	34.48
229	0.01	34.78	34.78
230	0.01	35.08	35.08
231	0.01	35.38	35.38
232	0.01	35.68	35.68
233	0.01	35.98	35.98
234	0.01	36.28	36.28
235	0.01	36.58	36.58
236	0.01	36.88	36.88
237	0.01	37.18	37.18
238	0.01	37.48	37.48
239	0.01	37.78	37.78
240	0.01	38.08	38.08
241	0.01	38.38	38.38
242	0.01	38.68	38.68
243	0.01	38.98	38.98
244	0.01	39.28	39.28
245	0.01	39.58	39.58
246	0.01	39.88	39.88
247	0.01	40.18	40.18
248	0.01	40.48	40.48
249	0.01	40.78	40.78
250	0.01	41.08	41.08
251	0.01	41.38	41.38
252	0.01	41.68	41.68
253	0.01	41.98	41.98
254	0.01	42.28	42.28
255	0.01	42.58	42.58
256	0.01	42.88	42.88
257	0.01	43.18	43.18
258	0.01	43.48	43.48
259	0.01	43.78	43.78
260	0.01	44.08	44.08
261	0.01	44.38	44.38
262	0.01	44.68	44.68
263	0.01	44.98	44.98
264	0.01	45.28	45.28
265	0.01	45.58	45.58
266	0.01	45.88	45.88
267	0.01	46.18	46.18
268	0.01	46.48	46.48
269	0.01	46.78	46.78
270	0.01	47.08	47.08
271	0.01	47.38	47.38
272	0.01	47.68	47.68
273	0.01	47.98	47.98
274	0.01	48.28	48.28
275	0.01	48.58	48.58
276	0.01	48.88	48.88
277	0.01	49.18	49.18
278	0.01	49.48	49.48
279	0.01	49.78	49.78
280	0.01	50.08	50.08
281	0.01	50.38	50.38
282	0.01	50.68	50.68
283	0.01	50.98	50.98
284	0.01	51.28	51.28
285	0.01	51.58	51.58
286	0.01	51.88	51.88
287	0.01	52.18	52.18
288	0.01	52.48	52.48
289	0.01	52.78	52.78
290	0.01	53.08	53.08
291	0.01	53.38	53.38
292	0.01	53.68	53.68
293	0.01	53.98	53.98
294	0.01	54.28	54.28
295	0.01	54.58	54.58
296	0.01	54.88	54.88
297	0.01	55.18	55.18
298	0.01	55.48	55.48
299	0.01	55.78	55.78
300	0.01	56.08	56.08
301	0.01	56.38	56.38
302	0.01	56.68	56.68
303	0.01	56.98	56.98
304	0.01	57.28	57.28
305	0.01	57.58	57.58
306	0.01	57.88	57.88
307	0.01	58.18	58.18
308	0.01	58.48	58.48
309	0.01	58.78	58.78
310	0.01	59.08	59.08
311	0.01	59.38	59.38
312	0.01	59.68	59.68
313	0.01	59.98	59.98
314	0.01	60.28	60.28
315	0.01	60.58	60.58
316	0.01	60.88	60.88
317	0.01	61.18	61.18
318	0.01	61.48	61.48
319	0.01	61.78	61.78
320	0.01	62.08	62.08
321	0.01	62.38	62.38
322	0.01	62.68	62.68
323	0.01	62.98	62.98
324	0.01	63.28	63.28
325	0.01	63.58	63.58
326	0.01	63.88	63.88
327	0.01	64.18	64.18
328	0.01	64.48	64.48
329	0.01	64.78	64.78
330	0.01	65.08	65.08
331	0.01	65.38	65.38
332	0.01	65.68	65.68
333	0.01	65.98	65.98
334	0.01	66.28	66.28
335	0.01	66.58	66.58
336	0.01	66.88	66.88
337	0.01	67.18	67.18
338	0.01	67.48	67.48
339	0.01	67.78	67.78
340	0.01	68.08	68.08
341	0.01	68.38	68.38
342	0.01	68.68	68.68
343	0.01	68.98	68.98
344	0.01	69.28	69.28
345	0.01	69.58	69.58
346	0.01	69.88	69.88
347	0.01	70.18	70.18
348	0.01	70.48	70.48
349	0.01	70.78	70.78
350	0.01	71.08	71.08
351	0.01	71.38	71.38
352	0.01	71.68	71.68
353	0.01	71.98	71.98
354	0.01	72.28	72.28
355	0.01	72.58	72.58
356	0.01	72.88	72.88
357	0.01	73.18	73.18
358	0.01	73.48	73.48
359	0.01	73.78	73.78
360	0.01	74.08	74.08
361	0.01	74.38	74.38
362	0.01	74.68	74.68
363	0.01	74.98	74.98
364	0.01	75.28	75.28
365	0.01	75.58	75.58
366	0.01	75.88	75.88
367	0.01	76.18	76.18
368	0.01	76.48	76.48
369	0.01	76.78	76.78
370	0.01	77.08	77.08
371	0.01	77.38	77.38
372	0.01	77.68	77.68
373	0.01	77.98	77.98
374	0.01	78.28	78.28
375	0.01	78.58	78.58
376	0.01	78.88	78.88
377	0.01	79.18	79.18</

CANAD[illegible]

IES	Oct				1993	
	25	22	21	20	HIGH	LOW
AUSTRALIA						
AN Debenhams (A/NR)	3946.9	3901.4	3906.4	3931.7	3965.50 (A/NR)	1485.00 (A/NR)
AN Debenhams (A/NR)	857.3	876.3	875.2	882.9	894.50 (A/NR)	884.70 (A/NR)
AUSTRIA						
Bank Austria (W/22/94)	414.44	416.21	415.10	415.57	416.58 (A/NR)	392.26 (A/NR)
Thalweg Bank (A/NR)	1071.59	1074.39	1071.05	1071.19	1073.25 (A/NR)	1125.45 (A/NR)
BELGIUM (A/NR)	1574.58	1574.71	1575.65	1574.15	1585.05 (A/NR)	1476.88 (A/NR)
DEMANK						
Opportunity Sec (A/NR)	347.12	346.55	343.99	343.69	347.12 (A/NR)	281.90 (A/NR)
FRANCE						
CAE General (A/NR)	158.00	156.88	156.18	1592.0	1624.86 (A/NR)	843.10 (A/NR)
PRINCE						
CAE General (A/NR)	688.23	686.96	592.24	591.86	688.23 (A/NR)	477.24 (A/NR)
CAE General (A/NR)	223.27	223.81	219.72	221.46	221.46 (A/NR)	171.21 (A/NR)
GERMANY						
FAZ Media (A/NR)	762.12	762.64	762.30	762.10	762.67 (A/NR)	598.92 (A/NR)
Telecom (A/NR)	2268.2	2270.4	2281.8	2288.0	2292.48 (A/NR)	1888.33 (A/NR)
Telecom (A/NR)	2514.99	2505.17	2504.09	2504.38	2511.35 (A/NR)	1945.99 (A/NR)
HONG KONG						
Hong Sang Bank (A/NR)	6767.50	6710.32	6694.89	6692.88	6821.13 (A/NR)	5402.88 (A/NR)
ITALY						
SEI Bank (A/NR)	64	1763.55	1763.50	1762.21	1768.80 (A/NR)	1191.10 (A/NR)
ISRAEL						
Bank Leumi (A/NR)	392.21	393.76	392.73	393.25	392.80 (A/NR)	462.30 (A/NR)
Bank Leumi (A/NR)	1356.0	1360.0	1360.0	1358.25	1360.00 (A/NR)	988.00 (A/NR)
JAPAN						
DAIWA (A/NR)	2698.33	2699.64	2697.62	2697.45	2714.41 (A/NR)	1637.45 (A/NR)
DAIWA (A/NR)	1604.41	1603.96	1603.82	1603.82	1605.97 (A/NR)	1258.05 (A/NR)
DAIWA (A/NR)	2167.77	2169.23	2169.76	2169.76	2169.76 (A/NR)	1671.77 (A/NR)
MALAYSIA						
HSBC Comptable (A/NR)	635.66	631.11	627.90	623.95	637.00 (A/NR)	614.26 (A/NR)
NETHERLANDS						
ABN-NM (A/NR)	406.1	408.2	404.7	401.3	405.20 (A/NR)	290.70 (A/NR)
ABN-NM (A/NR)	264.0	265.5	262.2	260.3	263.00 (A/NR)	195.00 (A/NR)

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1-800-525-7777, Fax: 281-777-1121

4 pm close October 25

NEW YORK STOCK EXCHANGE COMPOSITE PRICES

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NYSE COMPOSITE PRICES

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Stock	High	Low	Open	Close	Change
IBM Corp	125.00	124.00	124.50	124.00	-0.50
Microsoft	65.00	64.00	64.50	64.00	-0.50
Oracle Corp	45.00	44.00	44.50	44.00	-0.50
Sun Microsystems	35.00	34.00	34.50	34.00	-0.50
Intel Corp	25.00	24.00	24.50	24.00	-0.50
Motorola Inc	15.00	14.00	14.50	14.00	-0.50
Rockwell International	10.00	9.00	9.50	9.00	-0.50
Boeing Co	8.00	7.50	7.75	7.50	-0.25
Lockheed Martin	7.00	6.50	6.75	6.50	-0.25
Northrop Grumman	6.00	5.50	5.75	5.50	-0.25
Raytheon Co	5.00	4.50	4.75	4.50	-0.25
General Dynamics	4.00	3.50	3.75	3.50	-0.25
Westinghouse Electric	3.00	2.50	2.75	2.50	-0.25
3M Co	2.00	1.50	1.75	1.50	-0.25
Johnson & Johnson	1.00	0.50	0.75	0.50	-0.25
Pfizer Inc	0.50	0.25	0.375	0.25	-0.125
Merck & Co	0.40	0.20	0.30	0.20	-0.10
Novartis AG	0.30	0.15	0.225	0.15	-0.075
Roche Holding	0.20	0.10	0.15	0.10	-0.05
Glaxo Wellcome	0.10	0.05	0.075	0.05	-0.025
Novartis AG	0.05	0.025	0.0375	0.025	-0.0125
Roche Holding	0.04	0.02	0.03	0.02	-0.01
Glaxo Wellcome	0.02	0.01	0.015	0.01	-0.005
Novartis AG	0.01	0.005	0.0075	0.005	-0.0025
Roche Holding	0.005	0.0025	0.00375	0.0025	-0.00125
Glaxo Wellcome	0.002	0.001	0.0015	0.001	-0.0005
Novartis AG	0.001	0.0005	0.00075	0.0005	-0.00025
Roche Holding	0.0005	0.00025	0.000375	0.00025	-0.000125
Glaxo Wellcome	0.0002	0.0001	0.00015	0.0001	-0.00005
Novartis AG	0.0001	0.00005	0.000075	0.00005	-0.000025
Roche Holding	0.00005	0.000025	0.0000375	0.000025	-0.0000125
Glaxo Wellcome	0.00002	0.00001	0.000015	0.00001	-0.000005
Novartis AG	0.00001	0.000005	0.0000075	0.000005	-0.0000025
Roche Holding	0.000005	0.0000025	0.00000375	0.0000025	-0.00000125
Glaxo Wellcome	0.000002	0.000001	0.0000015	0.000001	-0.0000005
Novartis AG	0.000001	0.0000005	0.00000075	0.0000005	-0.00000025
Roche Holding	0.0000005	0.00000025	0.000000375	0.00000025	-0.000000125
Glaxo Wellcome	0.0000002	0.0000001	0.00000015	0.0000001	-0.00000005
Novartis AG	0.0000001	0.00000005	0.000000075	0.00000005	-0.000000025
Roche Holding	0.00000005	0.000000025	0.0000000375	0.000000025	-0.0000000125
Glaxo Wellcome	0.00000002	0.00000001	0.000000015	0.00000001	-0.000000005
Novartis AG	0.00000001	0.000000005	0.0000000075	0.000000005	-0.0000000025
Roche Holding	0.000000005	0.0000000025	0.00000000375	0.0000000025	-0.00000000125
Glaxo Wellcome	0.000000002	0.000000001	0.0000000015	0.000000001	-0.0000000005
Novartis AG	0.000000001	0.0000000005	0.00000000075	0.0000000005	-0.00000000025
Roche Holding	0.0000000005	0.00000000025	0.000000000375	0.00000000025	-0.000000000125
Glaxo Wellcome	0.0000000002	0.0000000001	0.00000000015	0.0000000001	-0.00000000005
Novartis AG	0.0000000001	0.00000000005	0.000000000075	0.00000000005	-0.000000000025
Roche Holding	0.00000000005	0.000000000025	0.0000000000375	0.000000000025	-0.0000000000125
Glaxo Wellcome	0.00000000002	0.00000000001	0.000000000015	0.00000000001	-0.000000000005
Novartis AG	0.00000000001	0.000000000005	0.0000000000075	0.000000000005	-0.0000000000025
Roche Holding	0.000000000005	0.0000000000025	0.00000000000375	0.0000000000025	-0.00000000000125
Glaxo Wellcome	0.000000000002	0.000000000001	0.0000000000015	0.000000000001	-0.0000000000005
Novartis AG	0.000000000001	0.0000000000005	0.00000000000075	0.0000000000005	-0.00000000000025
Roche Holding	0.0000000000005	0.00000000000025	0.000000000000375	0.00000000000025	-0.000000000000125
Glaxo Wellcome	0.0000000000002	0.0000000000001	0.00000000000015	0.0000000000001	-0.00000000000005
Novartis AG	0.0000000000001	0.00000000000005	0.000000000000075	0.00000000000005	-0.000000000000025
Roche Holding	0.00000000000005	0.000000000000025	0.0000000000000375	0.000000000000025	-0.0000000000000125
Glaxo Wellcome	0.00000000000002	0.00000000000001	0.000000000000015	0.00000000000001	-0.000000000000005
Novartis AG	0.00000000000001	0.000000000000005	0.0000000000000075	0.000000000000005	-0.0000000000000025
Roche Holding	0.000000000000005	0.0000000000000025	0.00000000000000375	0.0000000000000025	-0.00000000000000125
Glaxo Wellcome	0.000000000000002	0.000000000000001	0.0000000000000015	0.000000000000001	-0.0000000000000005
Novartis AG	0.000000000000001	0.0000000000000005	0.00000000000000075	0.0000000000000005	-0.00000000000000025
Roche Holding	0.0000000000000005	0.00000000000000025	0.000000000000000375	0.00000000000000025	-0.000000000000000125
Glaxo Wellcome	0.0000000000000002	0.0000000000000001	0.00000000000000015	0.0000000000000001	-0.00000000000000005
Novartis AG	0.0000000000000001	0.00000000000000005	0.000000000000000075	0.00000000000000005	-0.000000000000000025
Roche Holding	0.00000000000000005	0.000000000000000025	0.0000000000000000375	0.000000000000000025	-0.0000000000000000125
Glaxo Wellcome	0.00000000000000002	0.00000000000000001	0.000000000000000015	0.00000000000000001	-0.000000000000000005
Novartis AG	0.00000000000000001	0.000000000000000005	0.0000000000000000075	0.000000000000000005	-0.0000000000000000025
Roche Holding	0.000000000000000005	0.0000000000000000025	0.00000000000000000375	0.0000000000000000025	-0.00000000000000000125
Glaxo Wellcome	0.000000000000000002	0.000000000000000001	0.0000000000000000015	0.000000000000000001	-0.0000000000000000005
Novartis AG	0.000000000000000001	0.0000000000000000005	0.00000000000000000075	0.0000000000000000005	-0.00000000000000000025
Roche Holding	0.0000000000000000005	0.00000000000000000025	0.000000000000000000375	0.00000000000000000025	-0.000000000000000000125
Glaxo Wellcome	0.0000000000000000002	0.0000000000000000001	0.00000000000000000015	0.0000000000000000001	-0.00000000000000000005
Novartis AG	0.0000000000000000001	0.00000000000000000005	0.000000000000000000075	0.00000000000000000005	-0.000000000000000000025
Roche Holding	0.00000000000000000005	0.000000000000000000025	0.0000000000000000000375	0.000000000000000000025	-0.0000000000000000000125
Glaxo Wellcome	0.00000000000000000002	0.00000000000000000001	0.000000000000000000015	0.00000000000000000001	-0.000000000000000000005
Novartis AG	0.00000000000000000001	0.000000000000000000005	0.0000000000000000000075	0.000000000000000000005	-0.0000000000000000000025
Roche Holding	0.000000000000000000005	0.0000000000000000000025	0.00000000000000000000375	0.0000000000000000000025	-0.00000000000000000000125
Glaxo Wellcome	0.000000000000000000002	0.000000000000000000001	0.0000000000000000000015	0.000000000000000000001	-0.0000000000000000000005
Novartis AG	0.000000000000000000001	0.0000000000000000000005	0.00000000000000000000075	0.0000000000000000000005	-0.00000000000000000000025
Roche Holding	0.0000000000000000000005	0.00000000000000000000025	0.000000000000000000000375	0.00000000000000000000025	-0.000000000000000000000125
Glaxo Wellcome	0.0000000000000000000002	0.0000000000000000000001	0.00000000000000000000015	0.0000000000000000000001	-0.00000000000000000000005
Novartis AG	0.0000000000000000000001	0.00000000000000000000005	0.000000000000000000000075	0.00000000000000000000005	-0.000000000000000000000025
Roche Holding	0.00000000000000000000005	0.000000000000000000000025	0.0000000000000000000000375	0.000000000000000000000025	-0.0000000000000000000000125
Glaxo Wellcome	0.00000000000000000000002	0.00000000000000000000001	0.000000000000000000000015	0.00000000000000000000001	-0.000000000000000000000005
Novartis AG	0.00000000000000000000001	0.000000000000000000000005	0.0000000000000000000000075	0.000000000000000000000005	-0.0000000000000000000000025
Roche Holding	0.000000000000000000000005	0.0000000000000000000000025	0.00000000000000000000000375	0.0000000000000000000000025	-0.00000000000000000000000125
Glaxo Wellcome	0.000000000000000000000002	0.000000000000000000000001	0.0000000000000000000000015	0.000000000000000000000001	-0.0000000000000000000000005
Novartis AG	0.000000000000000000000001	0.0000000000000000000000005	0.00000000000000000000000075	0.0000000000000000000000005	-0.00000000000000000000000025
Roche Holding	0.0000000000000000000000005	0.00000000000000000000000025	0.000000000000000000000000375	0.00000000000000000000000025	-0.000000000000000000000000125
Glaxo Wellcome	0.0000000000000000000000002	0.0000000000000000000000001	0.00000000000000000000000015	0.0000000000000000000000001	-0.00000000000000000000000005
Novartis AG	0.0000000000000000000000001	0.00000000000000000000000005	0.000000000000000000000000075	0.00000000000000000000000005	-0.000000000000000000000000025
Roche Holding	0.00000000000000000000000005	0.000000000000000000000000025	0.0000000000000000000000000375	0.000000000000000000000000025	-0.0000000000000000000000000125
Glaxo Wellcome	0.00000000000000000000000002	0.00000000000000000000000001	0.000000000000000000000000015	0.00000000000000000000000001	-0.000000000000000000000000005
Novartis AG	0.00000000000000000000000001	0.000000000000000000000000005	0.0000000000000000000000000075	0.000000000000000000000000005	-0.0000000000000000000000000025
Roche Holding	0.000000000000000000000000005	0.0000000000000000000000000025	0.00000000000000000000000000375	0.0000000000000000000000000025	-0.00000000000000000000000000125
Glaxo Wellcome	0.000000000000000000000000002	0.000000000000000000000000001	0.0000000000000000000000000015	0.000000000000000000000000001	-0.0000000000000000000000000005
Novartis AG	0.000000000000000000000000001	0.0000000000000000000000000005	0.00000000000000000000000000075	0.0000000000000000000000000005	-0.00000000000000000000000000025
Roche Holding	0.0000000000000000000000000005	0.00000000000000000000000000025	0.000000000000000000000000000375	0.00000000000000000000000000025	-0.000000000000000000000000000125
Glaxo Wellcome	0.0000000000000000000000000002	0.0000000000000000000000000001	0.00000000000000000000000000015	0.0000000000000000000000000001	-0.00000000000000000000000000005
Novartis AG	0.0000000000000000000000000001	0.00000000000000000000000000005	0.000000000000000000000000000075	0.00000000000000000000000000005	-0.000000000000000000000000000025
Roche Holding	0.00000000000000000000000000005	0.000000000000000000000000000025	0.0000000000000000000000000000375	0.000000000000000000000000000025	-0.0000000000000000000000000000125
Glaxo Wellcome	0.00000000000000000000000000002	0.00000000000000000000000000001	0.000000000000000000000000000015	0.00000000	

WORLD STOCK MARKETS

AMERICA

US shares fall back on bond market losses

Wall Street

US share prices drifted in listless trading yesterday as further bond market losses undermined investor sentiment, writes Patrick Harrison in New York.

At 1 pm, the Dow Jones Industrial Average was 0.56 lower at 3,648.74. The more broadly based Standard & Poor's 500 was down 1.13 at 462.14, while the Amex composite was down 1.88 at 475.57, and the Nasdaq composite down 4.09 at 788.39. Trading volume on the NYSE was 143m shares by 1 pm.

Although investors remained generally optimistic about the economy, concern that stocks may be overpriced, with almost every major index at or near to its record high, kept demand in check yesterday.

Worries about rising interest rates - bond prices fell sharply for the third consecutive day, pushing the yield on the benchmark 30-year bond up above 6 per cent - also depressed stocks.

That the markets did not register bigger losses was due to some good corporate news in the form of the latest developments in the bid battle for Paramount Communications, and more positive data on the economy. The latest government figures showed that single-family home sales rose 2.6 per cent in September, which, along with other recent bullish data, led Mr Robert Reich, the labor secretary, to predict fourth quarter economic growth of more than 3 per cent.

On the corporate front, Paramount jumped 1 1/2% to 77 1/2% in volume of 1.7m shares on the news that Viacom had matched the \$4.8bn hostile offer for the entertainment group made by the hostile bidder QVC Network, and had begun a tender offer for Paramount stock at a price of \$30 a share. The news left Viacom shares, traded on the American

EUROPE

Profit-taking leaves most bourses slightly lower

PROFIT-taking brought bourses back from last Friday's heights, writes Our Markets Staff.

FRANKFURT consolidated after last Friday's gains, tilted down by slightly worse than expected inflation figures from Baden-Württemberg. The DAX index rose 8.22 to 2,074.39 on the session, but fell 9.23 from Friday's post-bourse close; yesterday afternoon, the index indicated DAX eased another 13.21 to 2,061.18.

Turnover fell from DM11bn to DM8.4bn. Carnemark featured in the official session: Daimler, in spite of a Der Spiegel report of a DM3.9bn expected operating loss this year, rose DM5.50 to DM755; Volkswagen gained DM7.70 to DM397.50 after jobs cuts news over the weekend; and Porsche, up DM20 to DM775, took its gains to 20 per cent this month.

Mr Hans Peter Wodniok, head of research at James Capel in Frankfurt, said that Capel was still broadly negative

on the sector; this included Porsche, although analysts are beginning to look at an earnings prospect of DM60 a share in three years' time as a result of cost cutting, and sales hopes for the new small Porsche model.

Other outperformers included Allianz, up DM41 to DM2,873, BHF Bank, DM10.50 better at DM536, and Hornbach, the do-it-yourself retailer, DM70 higher at DM1,850. Mr Wodniok noted that an analysts' meeting of Hornbach next week is expected to cover the flotation of its operating subsidiary; that, he said, could be the excuse for producing some surprisingly good figures.

PARIS ended moderately lower, off 4.13 at 2,227.73, after setting an intraday record high of 2,240. Turnover slipped back on the first day of the new account to FF3.1bn from Friday's FF3.3bn.

Synthelabo, the pharmaceutical subsidiary of L'Oréal, was one of the most actively traded stocks following news

FT-SE Actuaries Share Indices

		THE EUROPEAN SERIES									
		Open	10.30	11.00	12.00	13.00	14.00	15.00	Close		
Hourly changes											
FT-SE Eurotrack 100	1380.47	1379.87	1379.24	1379.21	1379.15	1379.05	1378.29	1378.09			
FT-SE Eurotrack 200	1444.08	1444.02	1443.98	1443.94	1443.88	1443.84	1442.54	1442.57			
		Oct 22									
FT-SE Eurotrack 100	1386.16	1386.45	1386.34	1386.34	1386.27	1386.27	1386.27	1386.27	1386.27	1386.27	1386.27
FT-SE Eurotrack 200	1447.89	1448.57	1448.07	1448.07	1448.07	1448.07	1448.07	1448.07	1448.07	1448.07	1448.07

that French regulators were to suspend authorisation of its anti-anxiety drug. The shares tumbled FF18.40 or 7.4 per cent to FF122.10, while those of L'Oréal lost FF18 to FF121.24. The drug, which has only been on sale in France, had been expected to contribute up to FF170m to annual sales in 1993. Synthelabo has seen its shares fall back in recent weeks from a year's high of FF262 set at the start of September.

Elsewhere Peugeot slipped FF3 to FF164.00 on news of plans for further job cuts within the group.

AMSTERDAM was slightly weaker following pressure on a number of major issues. The CBS Tendency index shed 0.6 to 138.5.

Chemical sector stocks continued to ease, with DSM down FF1.50 to FF159.70, and Alzco FF13.50 to FF178.00. Goldman Sachs remained positive on prospects in this sector. The US investment bank commented that efforts to restructure and reduce costs are likely to provide resilience against a near term downside in the share price. The bank esti-

mated earnings per share of FF20 by 1995, compared with forecasts of FF13.40 in 1993.

Wolters Kluwer, along with Heineken, was one of the day's gainers. The shares gained respectively 60 cents and FF1.20 to FF110.50 and FF198.50. Morgan Stanley came out positively on Wolters Kluwer as part of its strategic shift away from cyclical and into defensive growth stocks, looking for an initial price target of FF115.

MADRID saw late institutional buying which left share prices above their worst on a day depressed by profit-taking after last week's rally.

The general index closed 1.67 lower at 308.61 in volume steady at Pta27bn. Among banks, Popular fell Pta320 to Pta17,180 after last week's UK tour; a James Capel sell note said that 1994 was going to be a very difficult year for most Spanish banks, and that Popular seemed unlikely to be an exception.

ZURICH heard its good news

after hours, as CS Holding, the parent of Credit Suisse, announced "significantly higher" third-quarter earnings. Before that, insurers had seemed more vulnerable than banks among Swiss financials during a general market consolidation, the SMI index falling 16.7 to 2,884.9.

OSLO was little moved by news of Norsk Hydro's better than expected third quarter results and the All Share index slipped just 0.63 to 608.88. Norsk Hydro shares rose Nkr2.50 to Nkr215.50.

ISTANBUL lost 1.7 per cent after the prime minister Mrs Tansu Ciller, replaced four ministers at the weekend. The composite index ended 261.5 lower at 14,069.3.

ATHENS fell 1 per cent after weekend announcements by the government that no interest rate cuts were likely in the short-term. The general index closed 8.44 lower at 454.57.

Written and edited by William Cochrane and John Pitt.

ASIA PACIFIC

Nikkei firms ahead of East Japan Railway listing

Tokyo

THE Nikkei average firmed ahead of today's listing of East Japan Railway, as financial institutions and public fund managers pushed up activity by trading large-capital issues, writes Emilio Terazono in Tokyo.

The 225-issue average gained 44.50 to 20,309.33. The index rose to the day's high of 20,472.85 in the morning on institutional buying. Selling by corporations and arbitrageurs briefly pushed down the index to the day's low of 20,271.83 in the afternoon.

Volume amounted to 300m shares, against 315m. Declines outnumbered advances by 634 to 387, with 175 issues unchanged. Dealers and institutional investors shifted funds from smaller stocks to large-capital issues to lift volumes. Indices of small-capital stocks lost ground, with the OTC Jaseq average falling 1.98 per

cent and the second section index losing 1.23 per cent.

The Topix index of all first section stocks rose 6.35 to 1,669.44 and, in London, the ISE/Nikkei 50 index edged up 0.86 to 1,313.33. Traders said most investors were wary of building long positions ahead of the JR East listing, while some corporate investors unloaded holdings to raise funds to buy JR East shares.

Mr Chris Newton at James Capel said investors would want to keep share prices steady during the initial period after the listing, but he added that expectations of poor corporate results due to be released during the next few weeks would eventually trigger selling pressure.

Steels and shipbuilders were traded actively: Nippon Steel, the day's most active issue, rose Y6 to Y349 and Mitsubishi Heavy Industrial also gained Y6, to Y691.

The dollar's recovery against

the yen helped export-oriented issues. Sony rose Y50 to Y4,950 and Pioneer Electronic advanced Y60 to Y2,560. However, TDK lost Y100 to Y3,820 on reports of poor earnings prospects.

Financials, including banks, brokers and non-life insurers, firmed on bargain hunting. Industrial Bank of Japan put on Y70 to Y3,410 and Mitsubishi Bank appreciated Y90 to Y3,130. Nomura Securities rose Y30 to Y2,030 and Tokyo Marine & Fire moved forward Y30 to Y1,340.

In Osaka, the OSE average firmed 4.45 to 22,221.40 in volume of 27.4m shares.

Roundup

A MIXTURE of performances characterised yesterday's trading around the region's markets. Taiwan and New Zealand were closed.

HONG KONG rebounded from earlier losses to end higher on bargain hunting.

The Hang Seng index was finally up 36.23 at 8,755.60, after a fall of 94 points early in the session. Turnover shrank to HK\$3.1bn from HK\$5.5bn.

Among the major stocks, Cheung Kong finished 25 cents firmer at HK\$33.50 and Jardine Matheson was ahead 50 cents at HK\$70.

SINGAPORE firmed as recent gains were consolidated ahead of the listing of Singapore Telecom shares later this week. The Straits Times Industrial index added 12.49 at 2,102.58.

CWT Distribution, Singapore Technologies Industrial and IPC attracted interest on news that they would become component stocks of the index from November 2.

SEOUL was higher in moderate turnover, with Hanbo Steel and General Construction and Sammi Steel closing the day's limit up of Won600 and Won400 respectively at Won13,200 and Won8,650. The composite index rose

6.20 to 742.43. Turnover totalled Won581bn.

MANILA's composite index fell back by 29.81 to 2,321.18. Philippine Long Distance Telephone and Manila Electric eased 20 and 7.50 pesos respectively to 1,850 and 290 pesos. Turnover dropped to 674.2m pesos from 1.2m pesos.

KUALA LUMPUR saw most buying concentrated in second-line issues as falls in some major stocks dragged the composite index down 3.82 to 930.49.

Advance Synergy saw a day's high of M\$4.04 as rumours persisted of an asset injection, before ending 28 cents up at M\$3.78.

Total volume was 825m shares, against Friday's 760m. AUSTRALIA lost ground on a weaker futures market and declines in a number of leading issues. The All Ordinaries index retreated 14.5 to 2,046.9 in turnover of A\$36.8m. BHP shed 22 cents to A\$16.94 and News Corp 16 cents to

A\$11.16. Western Mining receded 12 cents to A\$5.43, CRA was down 4 cents at A\$15.36 and Lend Lease softened 3 cents to A\$18.58.

There were mixed performances among the banks, with National Australia Bank down 12 cents at A\$12.26, ANZ rallying 4 cents to A\$4.03 and Commonwealth gaining 5 cents at A\$8.90.

KARACHI added to its gains and the KSE index finished 15.72 higher at 1,501.40, recording another high for the year.

BOMBAY was firmer on the first day of the new account. The BSE-30 index climbed 16.22 to 2,737.58.

JAKARTA failed to be encouraged by measures aimed at deregulating the economy which were announced on Saturday. However, JP Steel rose Rp125, or 5.6 per cent, to Rp2,375 on expectations that there will be lower tariffs on iron and steel products. The JKSE index finished 1.75 easier at 464.47.

Choosing between Germany and France

MARKETS IN PERSPECTIVE		% change in local currency		% change starting 1993		% change in US \$	
		1 Week	4 Weeks	1 Year	Start of 1993	Start of 1993	Start of 1993
Austria	.....	+2.08	+1.81	+2.98	+32.68	+31.48	+27.81
Belgium	.....	+0.81	+1.02	+2.05	+25.05	+19.00	+12.89
Denmark	.....	+2.76	+4.70	+4.12	+36.78	+31.27	+27.72
Finland	.....	+3.78	+15.27	+141.23	+97.00	+84.03	+79.04
France	.....	+3.91	+6.06	+31.65	+23.54	+19.91	+16.67
Germany	.....	+2.87	+9.84	+35.60	+33.44	+32.62	+29.02
Ireland	.....	+3.25	+6.69	+66.03	+46.44	+30.44	+26.90
Italy	.....	+2.21	+0.13	+57.44	+41.77	+33.28	+28.65
Netherlands	.....	+3.91	+6.94	+36.70	+33.13	+32.18	+28.60
Norway	.....	+3.27	+10.81	+53.15	+40.12	+36.57	+32.87
Spain	.....	+3.22	+10.62	+58.43	+45.59	+28.02	+24.55
Sweden	.....	+1.74	+8.93	+83.68	+40.87	+27.13	+23.68
Switzerland	.....	+3.05	+9.18	+41.81	+30.18	+32.92	+29.32
UK	.....	+2.46	+5.92	+23.08	+13.94	+13.94	+10.85
EUROPE	.....	+2.89	+7.15	+33.42	+24.62	+22.48	+19.18
Australia	.....	-0.67	+5.53	+36.54	+27.61	+27.70	+24.24
Hong Kong	.....	+0.91	+18.09	+32.97	+56.68	+61.13	+58.76
Japan	.....	+1.10	+2.69	+29.08	+30.58	+46.50	+46.50
Malaysia	.....	+1.73	+14.41	+80.80	+72.31	+81.87	+76.95
New Zealand	.....	+1.03	+6.84	+63.20	+41.21	+57.40	+53.14
Singapore	.....	-1.40	+12.13	+77.31	+46.92	+57.48	+53.23
Canada	.....	-0.23	+5.83	+19.30	+18.65	+18.87	+13.71
USA	.....	-1.37	+0.95	+11.60	+8.08	+9.04	+6.08
Mexico	.....	+4.30	+10.46	+28.70	+11.77	+15.20	+12.08
South Africa	.....	-0.98	+5.53	+32.56	+23.93	+47.15	+43.18
WORLD INDEX	.....	+0.53	+3.84	+23.28	+18.02	+25.10	+25.11

† Based on October 22nd 1993. Copyright, The Financial Times Limited, Goldman, Sachs & Co. and NatWest Securities Limited.

By William Cochrane

Investors plumped for Europe last week according to the FT-Actuaries World Indices. It showed a gain of 2.8 per cent in local currency terms, and 7.1 per cent for October so far.

This compared with a rise of 1.1 per cent in Japan and a fall of 1.4 per cent in the US. Hong Kong had an average performance after starting with a gain of 8.8 per cent in the week before; Mexico relieved the North American tedium with a rise of 4.3 per cent.

The European week started well and took off again on Thursday when the German Bundesbank cut its discount and Lombard rates - the French equity market reacted most obviously, with the CAC-40 index ahead 2.3 per cent on the day. Germany picked up on Friday, but trailed on the week.

That set the stage for the renewal of the argument over which senior bourse to choose for recovery, Paris or Frankfurt. A top German equity

salesman says that German institutions had been sceptical and English fund managers uninterested in German stocks, but that US investors were pouring money into the Frankfurt bourse.

Goldman Sachs looked at what it called the "French-German conundrum" towards the end of last week: Mr Sushil Wadhvani and Mr Mushaq Shah said that, on most measures, the French equity market was significantly undervalued and the German market overpriced. "If interest rates were to fall to the 5 per cent area over, say, the next nine months in both countries, then," they said, "we could be very surprised if French equities did not significantly outperform the German market on a 12 to 15-month horizon."

Nomura's Mr Nicholas Knight, however, maintains his support for the UK, and gold: "The German and French equity markets have been looking for rate cuts all year," he says; "this development is in the price, and it is better to travel hopefully than to arrive."

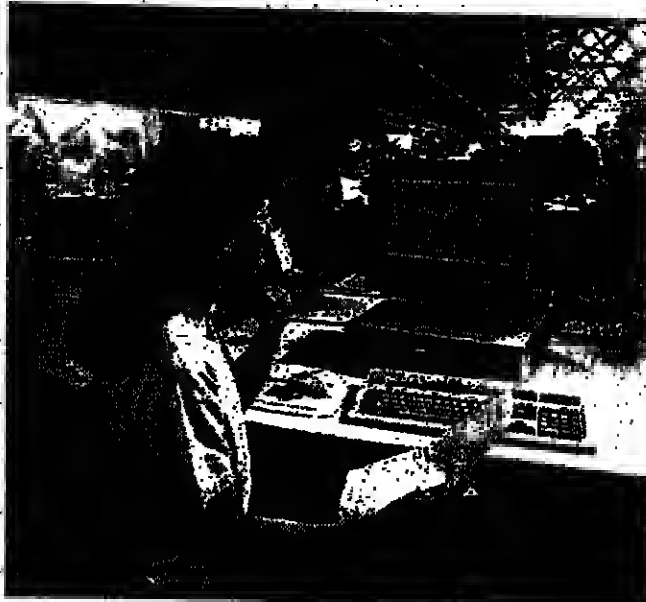
FT-ACTUARIES WORLD INDICES

Jointly compiled by The Financial Times Limited, Goldman, Sachs & Co. and NatWest Securities Limited in conjunction with the Institute of Actuaries and the Faculty of Actuaries

NATIONAL AND REGIONAL MARKETS		FRIDAY OCTOBER 22 1993										THURSDAY OCTOBER 21 1993										DOLLAR INDEX	
Figures in parentheses show number of lines of stock		US Dollar Index	Day's Change	Pound Sterling Index	Yen Index	DM Index	Local Currency Index	% chg on index	Gross Div. Yield	US Dollar Index	Day's Change	Pound Sterling Index	Yen Index	DM Index	Local Currency Index	% chg on index	Gross Div. Yield	1980 High	1990 Low	Year ago (approx)			
Australia (89)	.....	155.45	+0.5	156.46	106.32	135.37	154.41	+0.1	3.35	155.50	155.04	106.40	134.49	154.21	155.77	117.39	122.80	155.45	155.45	155.77		
Austria (17)	.....	179.28	-0.5	180.45	122.62	156.13	155.75	+0.2	1.01	180.10	179.58	123.24	155.78	155.40	184.47	131.15	151.77	179.28	179.28	179.28		
Belgium (42)	.....	150.58	-0.6	151.34	102.63	130.94	134.42	-0.2	4.28	151.50	151.05	103.05	131.03	134.69	156.78	131.19	159.07	150.58	150.58	159.07		
Canada (107)	.....	131.48	+0.8	132.84	85.93	114.49	124.20	-0.2	2.69	132.50	132.11	86.29	114.85	124.25	132.84	114.41	115.26	131.48	131.48	115.26		
Denmark (25)	.....	237.71	+0.2	239.26	162.59	207.00	217.28	+0.8	1.04	237.31	236.81	162.39	205.24	216.01	236.12	185.11	188.08	237.71	237.71	188.08		
Finland (23)	.....	124.88	+3.1	125.45	85.25	108.54	150.53	+3.2	0.89	120.89	120.53	82.72	104.55	145.88	124.83	65.50	63.08	124.88	124.88	63.08		
France (109)	.....	157.79	+0.6	158.50	105.55	132.55	151.75	+0.2	3.51	157.85	157.39	105.60	132.55	151.75	158.00	117.59	122.80	157.79	157.79	122.80		
Germany (60)	.....	132.43	+0.6	135.11	91.82	116.89	116.89	+1.3	1.82	133.42	133.02	91.31	115.39	115.29	136.13	101.91	109.49	132.43	132.43	109.49		
Hong Kong (16)	.....	347.31	-1.9	349.58	237.54	302.48	342.02	-1.9	3.01	354.10	353.05	242.29	308.25	315.64	357.10	218.82	238.29	347.31	347.31	238.29		
India (4)	.....	172.30	-0.8	173.43	117.85	150.05	176.05	-0.5	3.25	173.73	173.24	118.98	150.27	173.64	174.90	126.28	134.30	172.30	172.30	134.30		
Indonesia (1)	.....	145.24	+0.7	146.50	71.85	95.50	145.24	+0.7	1.98	146.50	146.00	71.85	95.50	145.24	146.50	71.85	95.50	145.24	145.24	95.50		
Japan (489)	.....	133.87	+1.3	154.87	105.24	104.31	105.24	+1.2	0.78	151.92	151.47	103.95	131.40	103.95	165.81	100.75	106.86	133.87	133.87	106.86		
Malaysia (99)	.....	482.85	+0.0	485.66	616.42	402.88	453.83	+0.2	1.51	482.49	481.12	616.45	399.96	453.41	482.85	255.65	262.37	482.85	482.85	262.37		
Mexico (19)	.....	1846.98	+1.3	1858.89	1263.23	1890.39	6293.28	+1.3	0.77	1824.45	1819.04	1247.72	1577.01	6200.29	1848.98	1410.00	1436.82	1846.98	1846.98	1436.82		
Netherlands (24)	.....	184.70	+0.3	185.97	133.71	188.56	167.33	+1.1	3.27	184.64	184.38	132.79	167.33	185.58	185.97	150.39	158.18	184.70	184.70	158.18		
Norway (23)	.....	145.24	+0.3	146.50	71.85	95.50	145.24	+0.3	1.98	146.50	146.00	71.85	95.50	145.24	146.50	71.85	95.50	145.24	145.24	95.50		
Norway (23)	.....	182.98	-0.4	184.17	125.15	139.35	181.18	+0.3	1.41	183.64	183.10	125.56	158.83	180.71	185.10	137.71	184.95	182.98	182.98	137.71		
Sweden (38)	.....	326.93	+0.9	329.06	263.61	284.70	236.99	+0.7	1.43	329.63	328.65	225.69	285.25	236.83	332.55	207.41	208.95	326.93	326.93	208.95		
South Africa (60)	.....	212.02	-0.1	213.40	145.01	184.63	194.75	-1.1	2.72	213.58	213.44	145.20	173.31	166.93	218.72	174.22	154.70	212.02	212.02	154.70		
Spain (46)	.....	145.24	+1.3	146.50	71.85	95.50	145.24	+1.3	1.98	146.50	146.00	71.85	95.50	145.24	146.50	71.85	95.50	145.24	145.24	95.50		
Switzerland (23)	.....	204.77	+0.5	206.10	140.05	178.32	244.18	+0.5	1.01	205.82	205.21	140.44	178.01	243.45	205.82	149.70	150.54	204.77	204.77	150.54		
Switzerland (50)	.....	146.14	-0.1	147.09	98.95	127.28	132.34	+0.4	1.62	146.29	145.85	100.11	126.53	131.64	148.18	108.91	111.76	146.14	146.14	111.76		
United Kingdom (218)	.....	191.06	-0.6	192.31	130.67	165.37	192.61	+0.4	3.72	192.17	191.60	131.48	165.19	191.63	192.07	162.00	170.74	191.06	191.06	170.74		
USA (519)	.....	188.93	-0.4	190.18	129.23	184.54	188.93	-0.4	2.73	189.75	189.19	129.55	184.11	188.75	191.56	175.38	186.94	188.93	188.93	175.38		
Europe (749)	.....	162.07	+0.1	163.13	110.63	141.15	155.59	+0.8	2.91	161.95	161.48	110.82	140.06	154.43	162.97	109.92	138.99	162.07	162.07	138.99		
Norice (114)	.....	192.86	+0.1	194.11	131.91	187.95	200.50	+0.7	1.22	192.88	192.14	131.14	186.84	199.08	194.54	142.21	144.29	192.86	192.86	144.29		
Pacific Basin (713)	.....	160.99	+1.0	162.04	110.61	120.10	114.28	+1.0	1.02	159.81	159.14	109.84	137.87	119.18	160.80	105.59	111.83	160.99	160.99	111.83		
Asia (104)	.....	163.72	+0.3	164.78	110.33	140.48	130.84	+0.4	1.05	163.89	163.42	110.58	137.89	119.18	160.80	105.59	111.83	163.72	163.72	111.83		
North America (829)	.....	183.25	+0.4	184.56	125.86	168.47	183.25	+0.4	2.72	183.06	182.51	127.30	154.90	185.29	187.68	151.21	165.85	183.25	183.25	165.85		
Europe Ex UK (531)	.....	143.26	+0.5	144.18	97.93	124.37	133.94	+1.0	2.38	142.55	142.13	97.58	123.31	132.95	143.73	112.51	116.80	143.26	143.26	116.80		
Pacific Ex Japan (244)	.....	230.22	-0.8	231.72	157.48	200.50	212.84	-0.7	2.73	232.16	231.47	158.88	200.20	214.24	232.18	182.70	182.10	230.22	230.22	182.10		
World Ex US (169)	.....	181.84	+0.8	182.98	110.78	141.02	132.96	+0.9	1.85	181.90	180.53	110.18	130.85	131.62	182.01	126.28	134.37	181.84	181.84	134.37		
World Ex UK (194)	.....	167.87	+0.3	168.56	114.82	146.20	167.87	+0.3	2.01	167.99	167.50	114.55	144.73	145.76	168.56	134.22	135.03	167.87	167.87	135.03		
World Ex So. At (1107)	.....	169.74	-0.2	170.84	118.10	141.02	132.96	+0.4	2.17	169.36	168.86	115.90	148.48	149.41	170.48	157.29	137.20	169.74	169.74	137.20		
World Ex Japan (269)	.....	190.35	-0.3	191.52	123.38	157.09	178.13	+0.0	2.77	190.28	189.28	123.74	156.41	176.17	181.53	157.47	155.04	190.35	190.35	155.04		

TECHNOLOGY IN THE OFFICE

Tuesday October 26 1993



Business-driven features: pictured, far left, is a PC-based client/server application to take the heat out of the budgetary process at every level, using the "Commander Budget" system from Comshare, a leading managerial applications provider.

Pictured, near left, is an NCR document management and workflow system in use at General Accident's offices at Glasgow, near Glasgow. See report on workgroup computing and document image processing, pages 6-7.

Pictured, right: at a hotel in India, the Alcatel 4300 office switching system, showing the operator's console and computer interface. See pages 2-4, for advances in office communications.



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Editorial production:
Michael Wiltshire

A revolution on the desk-top

Networks of powerful personal computers and workstations, along with cordless telephony and data systems, are transforming the way that companies operate, reports Paul Taylor

TECHNOLOGY and the office are inextricably intertwined. Without the telephone and keyboard there would be no modern office, and without the office there would be a much smaller market for technology.

The modern office has evolved over the last 150 years, aided by technological breakthroughs like the development of the telephone in the 19th century. However, the pace of change has accelerated dramatically over the past 15 years.

Since the late 1970s, digital technology has transformed the way information is collected, analysed, manipulated, transmitted and stored.

It has not led to the creation of the "paperless office" as some had predicted. Nevertheless, it is making possible the closer integration of data processing and telecommunications.

Perhaps the most dramatic change has been the arrival of the personal computer on to the office desktop. Increasingly these PCs are hooked together into networks in order to share data and digital peripherals, such as printers.

This step has put the power of yesterday's mainframe computers at the disposal of most office workers in a process which has become known as

"downsizing", or more recently "rightsizing" - to acknowledge that the mainframe or departmental mini-computer can still play a crucial role, especially where large databases are involved.

There is no doubt that the computer has changed the way business is conducted. As IBM, the master of the mainframe, is keen to point out, if all the automated financial transactions in the UK, including direct debits, were handled manually it is estimated that 72,000 extra banking staff would be needed.

Similarly, the Driver and Vehicle Licensing Agency in Swansea holds over 60m records on its mainframe computer. Normally the agency returns documents within three days of receipt, but if each file were checked manually it would take 114 years.

However, as a recent joint report from IBM and the Cranfield University management school confirmed, chief executives

are not concerned about the type of computer "platform" used in their business, "they want solutions, not boxes".

What matters increasingly is how technology is used and, in particular, whether it enhances competitive advantage and contributes to cost savings and greater efficiency.

For example, one of most often quoted statistics in the telecommunications industry is that more than two thirds of business telephone calls fail to reach their intended target.

One possible solution to this problem would be to introduce cordless office telephone lines and handsets. Indeed, GPT Communications Systems, Northern Telecom and Ericsson have all recently launched cordless PBX systems in Europe.

Ericsson, whose system is based on the digital European cordless telephony (DECT) standard is predicting that the cordless PBX will "revolutionise office communications during the 1990s".

The Swedish company expects the global market for cordless PBX extensions to be worth some \$5bn a year by 1995, while some independent analysts have predicted that cordless extensions will account for a third of the market for all business telephones by the end of the century.

In time, Mr Chris Gare, Mercury's manager of strategic technologies, believes cordless office-based telecommunications systems will be integrated with other digital telecommunications services including personal communications networks (PCNs), such as Mercury's One-2-One service in the UK and the next generation of personal digital assistants (PDAs).

Within the office, wireless local area networks linking desktop computers, workstations and other devices, without the need for fixed cabling have been launched by both NCR and Motorola.

Such developments raise questions about whether a centralised office structure will be needed in the future at all, or whether virtual private telephone networks and other advanced facilities, such as desktop video-conferencing systems, will enable office staff to be dispersed - or even to work from home.

"Demand for cordlessness will result because the technology facilitates many of the changes that are already gathering momentum," says Philip Ross, head of research at the Business Design Group consultancy in London.

"Flexibility and mobility will become the imperatives of the 1990s and the freedom that cordless telephony and data transfer allows can only accelerate this process as we move towards the virtual office."

Mr Ross argues that organisations are already moving towards greater flexibility as they "downsize", contract out services, and use consultants and part timers.

"We will see the emergence of a 'virtual office', more akin to a hotel, where individuals have flexible space where and when they need it, sharing facilities," he predicts.

Networks of smaller and more powerful workstations, linked to central databases are predicted in a new study by architects DEGW and the Building Research Establishment.

"Many of the problems associated with the introduction into offices of the first wave of distributed intelligence will be overcome. Workstations will be freed from the locational constraints of the traditional office," says the report.

Already a growing number of businesses are using cellular telephony, portable computers and mobile data networks to exchange information between a central office database and employees while they are on the move. Business customers are also integrating their PC networks and telephony to take advantage of value-added network services, such as electronic mail and electronic data interchange (EDI), which can remove the need to send and receive standard paper forms such as invoices, orders and bills.

DESPITE the advent of EDI and other office technology, about 95 per cent of information used in the office is still stored on paper, rather than electronically. Indeed far from dispensing with paper, office employees are handling ever increasing volumes of it.

At one organisation interviewed as part of a 1992 study by management consultants Touche Ross, the 2,000 staff dealt with 45 tonnes of incoming mail a year, and 48 tonnes of outgoing mail - equivalent to generating 25kg of paper per person.

The study also shows a dramatic growth in the use of electronic data, and a clear trend towards optical storage.

New hardware such as digital optical scanning, storage and retrieval devices and CD-Rom systems have begun to appear in the office, but so too have paper generators like high-volume electronic demand printers which link directly to computers and digital copiers which scan a hard copy once before reproducing multiple copies.

Indeed, office-based electronic printing is becoming increasingly sophisticated. For example, earlier this year Indigo, a small entrepreneurial Israeli company, demonstrated the first high quality colour digital offset press, which it described as "the marriage of offset printing and digital imaging."

The development of digital offset colour mirrors developments elsewhere in the office where previously unconnected pieces of electronic hardware are becoming integrated.

For example, multifunction digital devices which combine some or all of the features of a facsimile machine, photocopy, laser printer and scanner have begun to appear and

Continued on next page

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TECHNOLOGY IN THE OFFICE 2

Joia Shillingford looks at developments in office communications

How today's telephones limit tomorrow's technology

CORDLESS phones have begun to make an impact in the home. But traditional PABXs still dominate the office. Ian Garcia, marketing communications manager at GPT, says: "Cordless PABXs will never be the norm in business, but they are essential for managers who spend 50 to 60 per cent of their time away from their desks."

Factory managers at Wavin Industrial Products, a maker of plastic pipe and fitting systems, are testing GPT software which adds cordless communications to their standard PABX. Now the managers use cordless handsets to make and receive calls from the factory floor, where they spend much of their time.

Cordless phones also have a place in the "virtual office," like one run by Digital Equipment in Sweden. Here no-one has a permanent office, but desks and computers can be booked as and when they are needed. Cordless PABXs are ideal in this environment because the switchboard operator does not need to know where people are to put a call through. (See article on facing page).

Despite the benefits, take up of cordless PABXs has been slow. Keith Mallinson, director of research at the Yankee Group Europe, says: "This is starting to change with the launch of new products from Northern Telecom and Ericsson."

There are two main types of cordless technology - CT2 (cordless telephony 2) and DECT (Digital European Cordless Telephony standard). Northern Telecom and GPT both sell products which are developments from the CT2 standard, used in the UK Rabbit wireless phone network.

Ericsson prefers DECT, which is backed by Etsi, the European Telecom Standards Institute. Mr Mallinson believes there is room for both technologies and that the market will grow - "between 10 and 20 per cent of office workers could be using cordless phones by the end of the century," he says.

However, in the longer term, he believes that improvements to the interface between humans and phone networks will have a more significant effect on the way phones are used in offices.

Horrendous handsets

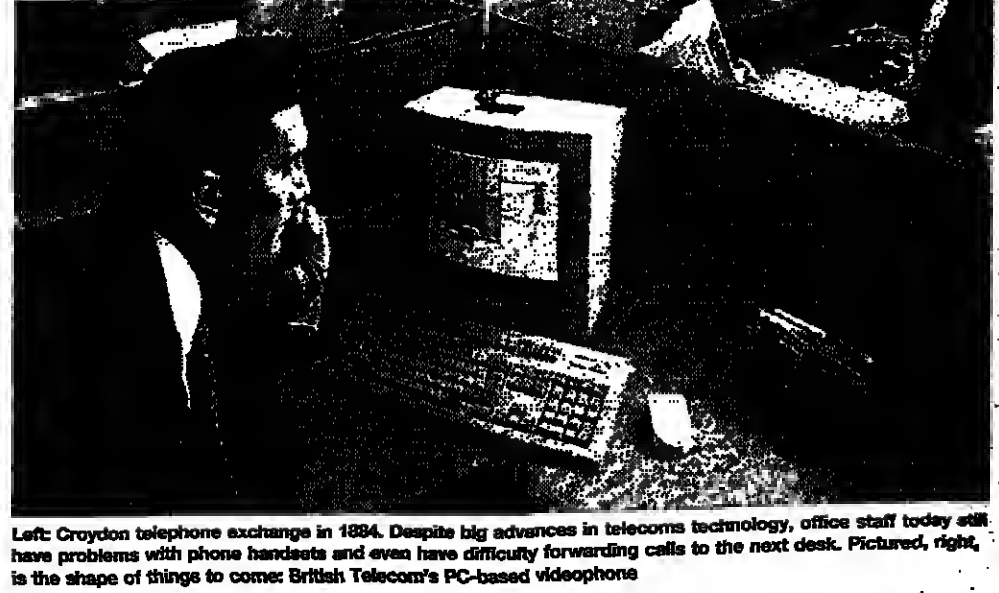
Telephone handsets seem easy to use so long as you only want to dial a number. But many people even have difficulty forwarding a call to a nearby desk. In fact, if you try to set up a conference call on a PABX or want to use BT's Star Services (such as Charge Advice), you will need a good memory for weird combinations of buttons, numbers and symbols. The poor interface between phone user and network will become even more

apparent when the next generation of phone services, such as Selective Call Forwarding, Selective Call Forwarding, and display of Caller ID, become available. Some believe that phones should be controlled by the user's personal computer. But many will find this a turn off. In the meantime, "screen phones" are being developed to fill the breach. These consist of a handset linked to a small liquid crystal display. The challenge for the telecoms industry is to make them as easy to use as through-the-wall cash machines or ATMs.

There are several screen phones available, (mainly in the US) including models from AT&T, Northern Telecom and Philips. Some have keyboards; others are operated by buttons near the screen.

Widespread use of screen phones is some way off, use of enhanced network services is much closer. This month BT begins trials in Perth, Scotland, of Caller ID equipment (which displays the caller's phone number) and Caller Return services.

Caller Return means that if the phone stops ringing before you get to it, you can find out the caller's phone number by pressing a few buttons. If the six-month trials are successful, BT will offer the services to phone users nationwide next year. Another kind of enhanced service is available to business users over the public phone network. Called Centrex, this is essentially a substitute for having an in-house PABX. It uses the intelligence in digital exchanges to offer PABX-like features. In the past, these services have made very little headway but they now have some high profile customers such as Daiwa Bank which uses Mercury's Centrex service.



Left: Croydon telephone exchange in 1984. Despite big advances in telecoms technology, office staff today still have problems with phone handsets and even have difficulty forwarding calls to the next desk. Pictured, right, is the shape of things to come: British Telecom's PC-based videophone

Private Network (VPN). A VPN is essentially a substitute for a network of leased lines. Telecoms carriers which sell VPNs argue that they offer the same service levels as private networks at a lower cost because they can carry several company's data at the same time.

Virtual private networks

Instead of (or as well as) replacing the PABX, it is possible to replace a private telecoms network with a Virtual

Private Network (VPN). A VPN is essentially a substitute for a network of leased lines. Telecoms carriers which sell VPNs argue that they offer the same service levels as private networks at a lower cost because they can carry several company's data at the same time.

to offer a greater variety of different tariffs than is possible under traditional tariffing regulations. It is early days for European virtual private networks but they are already attracting customers like Barclays Bank.

Race to offer telecoms 'outsourcing'

VPNs usually form part of the portfolio of services offered by telecoms suppliers which want to win telecoms outsourcing (or managed network services) business. Telecoms outsourcing involves taking over

the management and day-to-day running of a company's telecommunications network.

Sometimes the network is already in existence. Sometimes the telecoms company expands it or builds a new one, often making use of its own voice and data networks.

Jonathan Crane, president of MCI National Accounts, says the global network outsourcing market is geared primarily towards the estimated 2,500 multinational corporations in the world that have extensive communications networks spanning the globe.

These have to deal with a multiplicity of telecommunications carriers and bills in a variety of currencies. They therefore have much to gain from handing over their networks to a third party.

A bigger incentive, however,

is the potential for cost reduction. For example, US bank J.P. Morgan expects to save \$12.5m in operating expenses through its \$30m five-year contract with BT and could save more from its \$90m contract with MCI/Infonet.

MCI, now in a joint telecoms outsourcing venture with BT, estimates that the global network outsourcing market is worth \$5bn a year with annual growth of 15 to 20 per cent. Fears about quality of service prevent the market from growing any faster, reflecting the conservative nature of office communications.

□ The writer is editor of the FT newsletter Business Computing Brief.

□ "Beyond plain old telephone services: the future of circuit-switched services" is available from the Yankee Group Europe on (UK): 0933 246311.

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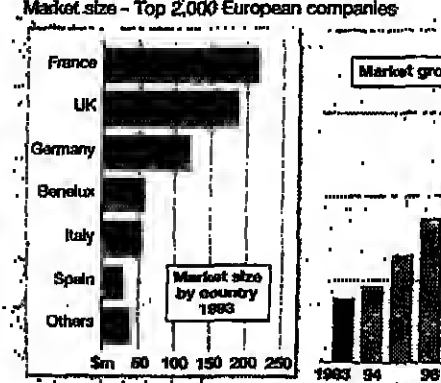
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FORECAST OF GROWTH IN TELECOMS

Leading telecom markets in the Asia-Pacific region

Country	Phone lines per 100 of the pop. in 1991	Phone lines per 100 of the pop. by year 2000	Line growth 1992-2000, in thousands
Japan	46.4	59.2	20,000
Australia	46.4	54.1	2,500
South Korea	33.7	48.4	8,000
India	0.7	2.1	15,000
China	0.7	2.3	20,000
Kong Kong	45.9	64.8	1,600
New Zealand	44.2	58.2	500
Singapore	39.9	57.1	600
Indonesia	0.7	2.1	3,000
Thailand	2.7	8.6	4,000
Malaysia	9.9	23.1	5,000
Philippines	1.0	3.0	2,000
Pakistan	1.0	2.5	3,000
Sri Lanka	0.7	2.4	300

□ While offices in the developed world are spoiled for choice with technical advances in communications, many other regions of the world are racing to catch up in terms of basic telephone connections. In particular, the dynamic economies of the Asia-Pacific area will experience rapid growth in telecom service revenues in this decade, as this table indicates. Similarly, Latin America shows strong demand for telecom modernisation.

□ Meanwhile, the success of mobile communications supports the 'teaprop' theory that areas such as eastern Europe may skip generations of telecom development and leap to the latest technology. Source: FT Telecoms Market Newsletter.

Technical advances are reshaping the office

Continued from previous page:

fax and other communications capabilities are being built directly into personal computers and office networks, removing the need for paper printouts entirely.

Technological improvements, dial-up high-capacity digital telephone lines and tumbling equipment prices are also beginning to make video-conferencing a real option for a much broader group of companies.

Already, the first desktop video-conferencing systems, usually using a card plugged into a PC and a small video camera, have begun to arrive. Some computer companies - including Olivetti, Europe's largest PC manufacturer - have developed systems designed to integrate data processing and video-conferencing into a single desk-top unit.

In order to deliver multimedia services such as real-time video, graphics and data across a personal computer network, new high speed, high capacity packet-switched technologies, such as ATM (Asynchronous Transfer Mode), have been developed.

Paul Taylor highlights advances in mobile communications

Cordless market has big potential

THE invention of the telephone in America in the 19th century enabled the office to be separated from the factory for the first time. Since then, the telephone in its traditional guise, has played a central role in most businesses. But while the fixed wire telephone freed the office from the production process, it has tied the office worker to the desk. Now the introduction and rapid growth of mobile and cordless telephony promises to untether the telephone and the telephone user.

"At the moment, telephones in the office are linked to desks, computers are connected together in local area networks and 80 miles of cable snakes round an average office building," says Philip Ross, head of research at Business Design Group, a UK-based design consultancy. "People work in the same location every day because communications are fixed between physical places."

However, radio telephony is beginning to challenge these restrictions. PABX manufacturers like GPT Communications Systems are already supplying systems which support cordless handsets within the office.

GPT's ISDX 100 system, which was

launched earlier this year, is based upon the same digital CT2 technology as telepoint systems like Hutchison's Rabbit service in the UK and is designed for small to medium-sized businesses. Canada's Northern Telecom has launched a similar system called the Companion 100 which is also available from BT.

Market analysts believe that the global market for cordless PABX extensions will be worth about \$50m a year by 1996, buoyed by the adoption of the digital European cordless telephony standard.

Aside from providing the benefits of mobile telephony within an office, these systems also enable new staff members to be accommodated with the minimum of inconvenience. However, rival systems based on a European cordless standard called Dect (Digital European Cordless Telecommunications) are beginning to appear from companies such as Ericsson, Philips and Alcatel which claim that the system has advantages over CT2, particularly for heavy use within office buildings.

Ericsson, which has just launched its Freeset system in Europe, acknowledges that the cordless PABX market has been slow to develop so far, but nevertheless

expects the global market for cordless PABX extensions to be worth about \$50m a year by 1996, buoyed by the adoption of the Dect technology standard.

"Dect is by far the best technology for cordless PABX systems," claims Hans van der Hoek, Ericsson's sales and distribution manager for Freeset, "apart from being a

mandatory standard within Europe, only Dect has the capability to create offices in which almost everyone uses a cordless phone."

While CT2 and Dect can provide mobility for voice telecommunications within the office, other solutions are required once the executive, sales representative or engineer travels out of the office.

The past 18 months has seen the launch of the second generation of mobile telecom networks in Europe based on digital rather than analogue technology. These new digital networks promise to deliver a wide range of sophisticated new voice and data services for those on the move.

By the end of this decade, half of all telephone calls worldwide are expected to originate or terminate on a mobile phone - and a growing proportion of those telephones will be operating on the new digital technology which boasts some advantages over older analogue systems.

Among these, digital mobile telephones can provide more reliable, clearer and more secure telecoms - although at least for the moment these usually have to be offset by higher equipment costs.

Europe has taken the lead in the switch to digital systems spurred by the adoption in the mid 1980s of a pan-European digital telecommunications standard called GSM (Groupe Speciale Mobile).

The first GSM networks were launched 15 months ago and all the leading European Community states apart from Spain now have them in operation. By the end of this year Dataguest, the market research organisation, has forecast that there will be 1.1m digital subscribers in Europe, growing to 8.3m by the end of 1996.

In the UK, Vodafone's GSM network is already operational while Cellnet plans to launch its system early next year, initially on a regional basis. Vodafone has already reached GSM roaming agreements

with a number of overseas network operators which enables GSM subscribers carrying their personal smartcards which slot into GSM handsets to make calls using a GSM phone anywhere in Europe.

Vodafone has also launched a second national digital service called MetroDigital which exploits GSM technology but provides lower cost local calls and could prove particularly popular with business customers in urban areas.

Meanwhile, the first PCN (Personal Communications Network) service, dubbed One-2-One, was launched last month in the London area by a joint venture of Mercury Communications and US West. Initially its coverage is confined to the M25 area around London, but coverage will expand rapidly.

Like MetroDigital, One-2-One is targeted mainly at urban customers who require a high quality digital service outside the office or home. Next April, a second PCN service is due to be launched in the UK by Hutchison Microtel, a subsidiary of Hutchison Telecom and elsewhere in Europe, PCN services are likely to be developed in Germany, France and Spain.

Another advantage of these new digital mobile services is that they are also easier to integrate with fixed telecommunications and data processing equipment and enable network operators and others to provide a wide range of value added customer services like messaging services and data transmission.

Continued on next page



Freeset, in use here, is claimed to be the first large-scale business cordless phone system from Ericsson to meet the new digital European cordless telecom (DECT) standard

VOICE MESSAGING SYSTEMS

Ways to avoid 'the voice mail jail'

FIFTY per cent of all calls made are for one-way communication only, but they often interrupt work which is more important than the call itself. So says Nigel Harte, business manager for voice products at Mercury Communications.

Irritation at these interruptions is helping to increase the take up of answering machines, voice messaging and voice processing. The latest models of answering machines come complete with cordless phone, and some provide an electronic handshake between base station and handset for extra security.

Cordless answering machines are expensive. In the UK, Dixons, the high-street electrical retailer, sells two models: one from South Western Bell for £149.99 and one from Panasonic for £179.99. This compares with £29.99 for its cheapest non-cordless machine from Betacom.

On standard answering machines, popular features include automatic dating and timing of messages (by a computer-generated voice), the ability to switch the machine on remotely, and "toll saver", available on Panasonic's £59.99 Ease-Phone and some others. If the Ease-Phone does not pick up the call on the fourth ring, the owner should hang up because there are no messages.

Backlash against voice messaging: For the corporate environment, voice messaging systems offer many more features than answering machines. But all too often they are implemented using the answering machine as a model.

In the US, this has led to something of a backlash against voice messaging. For example, the chief executive of First Union Corporation, made news when he sent a memo banning his company's voice messaging system after his call to a senior manager was greeted with a recorded message. His memo won applause from employees who also hated the system.

Since then, the voice messaging industry has taken steps to make sure the systems are used more effectively. In July 1992, leading voice messaging manufacturers and service providers (including AT&T, British Telecom Mobile, Octel Communications Corporation and VMX Inc.) formed the Voice Messaging Educational Committee (VMEC), and this year the committee has published a US-market survey *Voice Messaging: a vital link in Business Communications* and a booklet on voice mail etiquette.

At their simplest, voice mail systems allow callers to leave a message if the person they want to talk to is not available. By dialling the appropriate voice mailbox number (and a code), users can play messages back or forward them to another mailbox. But if a voice messaging system is poorly implemented, the customer may simply get passed from voice mailbox to voice mailbox, or from menu of options to menu of options. This frustrating state is known as "voice mail jail" because the caller feels trapped in the system.

The etiquette guide suggests: "Tell callers how they can easily reach someone 'live' if their call is urgent." In fact, the

If a voice messaging system is poorly implemented, the frustrated customer may simply get passed from voice mailbox to voice mailbox, as if trapped in the system

current trend in the US is to use the systems to augment the work of humans, rather than as an excuse for firing the receptionist.

There are two main types of voice messaging system: public services (sometimes linked to a special voice mail phone number) offered by telecom carriers such as British Telecom and Mercury; and premises-based systems, where a company buys voice messaging equipment for use with the in-house phone system.

Researchers BIS Mackintosh say there will be 1.4m public voice mail users in Europe on fixed and mobile systems by

the end of the year, rising to 5.4m in 1997. Meanwhile, premises-based systems have grown 70 per cent a year between 1991 and 1993.

In the UK, the profile of public voice messaging is increasing, largely because cellular phone operators, such as Cellnet, Vodafone and One-2-One (from Mercury), provide voice mailboxes linked to users' mobile phones.

Visual voice mailboxes: As well as spreading to mobile phone users, "voice messaging technologies are moving to the desktop and becoming integrated with other forms of communication, such as electronic mail and fax," according to Elaine Cascio, a consultant at US voice systems consultancy Vanguard. For example, products are emerging which allow a list of voice messages to be viewed on a personal computer.

Particular messages can then be selected and played back on the PC (if it has voice capabilities) or through the phone. Suppliers which have (or are developing) integrated products for the desktop include VMX, Octel Communications, C3, Applied Technology, Active Voice and Conversa.

Apart from voice messaging, there are two other types of voice system: audiotex (used for 0900 recorded information, such as racing results) and voice processing (or interactive voice response).

Voice processing is the type of technology used in telephone-based home banking systems. It might, for example, prompt the user to "press 'one' to order a cheque book, press 'two' for your bank balance."

In essence, these systems link a voice interface to a computer database. They allow customers to input and retrieve information using a touch-tone phone.

The technology is often used in financial applications. In the US, it is also used extensively to order goods published on the QVC home shopping channel.

In fact, QVC's system, Totote, has done a lot to expose consumers to voice response. Interest is growing in Europe too. Cascio says US voice response suppliers are experiencing 57 per cent growth in Europe, with much of this growth coming from pc-based or client-server systems.

Integration with fax: According to

Robinson Scurlock, head of BIS Mackintosh's messaging programme, one of the main drivers in the voice systems market is integration with fax.

For example, Octel Communications sells a fax store-and-forward product in the US which enables a caller to a voice mailbox to leave a voice message as well as transmit a fax into the mailbox (where it is stored on disk). The voice message can be collected in the usual way and the fax can be routed to a nearby fax machine by using the phone handset to give details of the fax number to the mailbox.

Integration is also evident in fax-on-demand products which enable users to phone a supplier, use touch tone prompts to indicate which product/service they are interested in, and then key in their fax number to get the details faxed to them.

Companies using fax-on-demand in the UK include Compaq and Advantstar, organisers of the recent "Voice '93" show held in London. And in the US, there are many bureaux that use fax-on-demand technology to send out companies' brochures, charging on a monthly or per item basis.

Fax-on-demand could be the ideal form of one-way communication. No-one gets interrupted and the fax starts to be sent before the caller puts down the phone.

Joia Shillingford

Copies of "Making the most of voice mail," a guide to voice mail etiquette, are available from any VMEC member-company or from Vanguard Communications on (US) 201 605 8000.

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TECHNOLOGY IN THE OFFICE 4

A SERIES of technological innovations beginning in the early 1980s ushered in the age of corporate two-way video-conferencing.

The Gulf war in 1991 gave the medium a substantial boost as large companies, particularly in the US, turned to interactive video-conferencing rather than risk the threat of terrorism.

Since then more compact, higher quality and cheaper systems have helped turn video-conferencing into an indispensable communications tool for many companies, government organisations and others.

Now the first desktop personal-computer based video-conferencing systems have begun to appear and promise to transform office telecommunications in the late 1990s.

Corporate converts to video-conferencing already include most of the Fortune 500 in the US and many large national and multinational companies in Europe.

Cost-savings on business travel are one of the main reasons why corporate users are turning to video-conferencing. For example, British Aerospace claims it saved \$80,000 on the cost of time and travel in the first year of ownership of two video-conferencing installations. Similarly, Rank Xerox calculated that it saved \$2,700 per video-conferencing hour after installing equipment at its Welwyn Garden City site to link with seven of its sites in the US.

Customers also report that video-conferencing can boost productivity, improve internal communications and enhance competitiveness.

Estimates for the size of the world-wide video-conferencing market vary widely. There is, however, general agreement that the market is growing quickly and that this growth is set to accelerate over the next couple of years.

North America is expected to remain the largest market accounting for up to 60 per cent of the total. Within Europe, the most developed markets are the UK, Germany and France, according to figures from Ovum, the telecommunications consultancy.

At the heart of all video-conferencing systems is the video codec (coder-decoder) - the component that converts video pictures, sound and control information into a compressed digital form ready for transmission and reception over digital telecommunications lines.



Video-conferencing moves out of the boardroom and into the office: shown here is a dial-up transatlantic video-conference on a system from PictureTel Corporation's European centre at Maidenhead

VIDEO-CONFERENCING

The promise of cost-savings

Greater silicon integration has enabled codec manufacturers to produce more compact systems at lower costs. This in turn has fuelled increasingly fierce competition between the system manufacturers and is one of the main driving forces behind the falling system prices and market growth.

Another important factor which has helped boost equipment sales recently has been agreement on video compression and other world standards by the Geneva-based grouping of telephone companies, the CCITT. These standards have been adopted by all the leading codec manufacturers and ensure inter-operability between systems.

The leading video codec manufacturers include US-based market pioneer Compression Labs (CL) which introduced the first commercially successful codec in 1982, its main rival, PictureTel, and Videotelcom (Vtel). European suppliers include BT and GPT.

The market for video-conferencing equipment divides into three main segments according to Mr Mike Newman, managing director of Internet Video-communications, the Bristol-based video-conferencing specialist and CL's distributor in the UK. These are:

- Large group or studio systems usually installed for use by between six and 10 people at each end. These bespoke studio systems cost from about 30,000 upwards and are the oldest segment of the market - they are the systems which have typically been used by senior executives in large organisations. Although they will remain an important part of the overall market, growth will probably not be as spectacular as that of smaller systems.

- Small group systems, suitable for up to four people at each end. These compact or cabinet systems first appeared in the late 1980s and usually come on wheels so they are also called "roll-around", "roll-about" or mobile room systems (MRS).

They represent a second generation of video-conferencing products made possible by the reduction in size and cost of equipment and are likely to be the fastest growing segment of the market over the next few years.

For example, CL's Eclipse system launched in February costs under \$20,000 for a complete fully-assembled and ready-to-use system including overhead graphics and other features until recently only found only on studio systems.

- Desktop or personal video systems provide one-to-one video-communications usually by adding a video camera and a plug-in video card to a personal computer attached to a digital telephone line or office network. CL's Cameo Personal Video System, launched last year, is one desktop option and several others are under development.

For example, Olivetti, Europe's largest PC manufacturer, working with BT over the past two-and-a-half years, has developed the personal communications computer (PCC). The PCC integrates the functions of a video telephone with mainstream computer applications and can transmit voice, video, data, text, and graphics over a single ISDN line.

Mr Mark Churchward, divisional manager in Olivetti's UK document management division, says with confidence "video on the desktop will revolutionise the way offices work." Certainly most analysts believe that by the mid-1990s, desktop video will become the fastest growing segment of the video-conferencing market.

"A lot of products are emerging from the development stage," said Ms Heide Aghnami of Dataquest, "desktop systems really have a very good chance

of success if you imagine the number of PC users in Europe."

Datapoint, another US codec manufacturer, has taken another, highly integrated, approach to providing video on the desktop by combining the functions of a PC and a video-conferencing system into a single workstation called Minx Link which can either work on a point-to-point basis or be hooked up to a local video network to provide multipoint video-conferencing.

Analysts are much less enthusiastic about the short-term prospects for the small-screen video-phones - dubbed "granny phones" - which are already on sale in a number of countries. Most see them developing mainly as a consumer electronics product rather than a business system and even then do not foresee substantial sales until prices come down considerably and picture quality is improved.

In contrast, equipment suppliers say that interest in full video-conferencing systems has never been stronger. "Prices of equipment are falling and that is opening up the market," says Mr Robert Ralphs, product manager for video-conferencing at Mercury which, like BT in the UK, also sells equipment alongside its network services. "Video-conferencing is perceived as cutting costs and it seems to have thrived on recession," he says.

Because equipment is getting cheaper, the purchasing decision is moving down the management ladder - "you don't necessarily need board approval now," notes Mr Ralphs. Cheaper prices also mean wider use of video-conferencing equipment and greater access to equipment within large companies.

Technical improvements have resulted in higher quality sound and pictures over lower capacity data lines. Meanwhile the wider availability of dial-up digital lines means that customers no longer have to own or lease expensive high capacity dedicated data lines which were not used all the time, or pre-book suitable telecom circuits in advance.

Today, the availability of standard digital office lines means that setting up a video-conference between two offices is no more difficult - or expensive - than making an ordinary voice call through a digital PBX.

Paul Taylor

In the US, Frank Lipsius looks at the growing appeal of online services

A rush to log on

FOR two years, Andre Knecht, national singles sales manager for Warner Bros Records, wanted to join the data superhighway with a CompuServe forum about the music industry.

He won his chance in mid-September when the Music Vendor forum joined what CompuServe spokeswoman Debra Young says is 400 forums on the online service.

Warner Bros is using its new outlet, accessible to 1.4m CompuServe subscribers throughout the world, to post new release information that is normally disseminated only within the music industry through timely new-release books.

Warner pop group Depeche Mode conducted an online press conference on the Music Vendor forum and Knecht fields questions on changing personnel of rock groups by staying late at the office to log on. Warner Bros does not expect to sell anything directly on CompuServe because, although shopping is an option of CompuServe's "electronic mall", information is really the service's stock in trade.

Information generates the most sales, as when people log themselves onto airline reservation systems and figure out their own itineraries or buy shares more cheaply than through brokers. But then CompuServe has extensive research for stock-market investing, including a screening service to highlight variables like book value, growth rate, debt/equity ratio and yield.

A stock quote is constantly at hand by typing GO BASIC-QUOTES, and the Analyzer answers financial and ownership questions.

CompuServe's income comes from keeping subscribers logged onto the system. CompuServe supplies the information while outside vendors make the sales. For less than \$10 a month, subscribers get unlimited use of free services but many are surcharged, including even the Music Vendor forum, though stock quotes are free. As "the Swiss army knife of all online ser-

vices," (in the words of PC World magazine), CompuServe has the most comprehensive online service.

But others have found their own niches in a field where information overlap is almost unavoidable. The Dow-Jones service has exclusive online use of the Wall Street Journal, its own flagship publication, while Mead Data Central secured exclusive online use of the New York Times for its Nexis service.

Other popular networks are Prodigy, a co-production of IBM and Sears, which has a consumer bent; GEnie, General Electric's consumer data service, which is popular for online conversation and having the latest shareware; and America Online, a newcomer with less information but speedy communications.

THE Windows interface has made access to the databases merely a few mouse clicks on provided software. Once logged on, subscribers see icons highlighting areas of access like news, research, investing, and travel. The services differ in the way they charge, some putting limits on the time made available with the monthly fee. All have surcharges for special services.

All these online networks are provided by for-profit companies, but the network of networks, which carries thousands of networks besides these, is government-subsidised and non-profit. The Internet, as it is called, came to prominence when Vice-President Al Gore discussed the data superhighway of the future, which he expected to be a public-private collaboration.

Many noted that such a thing already existed - Internet - which began as the means for academic exchange. It gradually grew to include companies exchanging data with customers, suppliers and their own far-flung outposts.

The debate over who should control the Internet goes on while commercial activity leaps through the cyberspace. Rupert Murdoch's News Corp. announced that it intends to buy Delphi Internet Services

which connects customers to the Internet, while American Telephone & Telegraph said that it soon would connect customers to the Internet with a toll-free 800 number.

The Internet itself is being inundated with businesses signing themselves on. As of March 1, this year, more than half of 3,400 networks registered for the Internet were private businesses, compared in 29 per cent research institutions and 4 per cent educational centres - "what is going on now is the equivalent of a gold rush," according to Phil Gross, chairman of the Internet Engineering Task Force. "Commercial companies, new users, the small mom-and-pop outfits - they're all rushing into this new frontier."

The task force is a voluntary group that deals with technical problems on the Internet, including an effort to provide more security on the system.

The lack of security is itself protection against too much commercial exploitation of the Internet. But as the National Science Foundation's meagre \$11.5m subsidy is gradually reduced, the system is a tempting target for commercialisation. For now, businesses that indulge in a cyberspace version of junk mail are being excoriated by other Internet users.

The future holds prospects for voice, text and video transmission, a development that will only increase the appeal of the online services. Already the Music Vendor forum foresees transmitting radio, digital audio files and video on CompuServe.

Knecht says that the Music Vendor forum had more than 1,000 log-ons its first day, a feat that indicates the power of this extra-terrestrial definition of office space. He is leading the way in breaking down the barriers between consumer and business communication.

But the rapid changes endanger the uniqueness of a channel pioneered by non-commercial interests. Its fate may be decided all too shortly, as the leading players in worldwide communications weigh in with their investments.

Data on the move

The alternative to cellular radio

end of the decade. New technologies such as satellite links are improving the service with single national zones and lower tariffs being introduced.

New market sectors are being opened up with the launch of specialist information networks such as Hutchison's Pulse financial data service. Some of the leading UK operators have amalgamated and new players such as Hutchison are developing new and innovative approaches to the market. According to Hutchison's managing director, Mike Bowerman: "There will be significant market growth for a service that has so far been underestimated. The potential exists to more than double the market by the year 2000."

Investment in terminals is low, prices are fixed and the service offers both national and international coverage. Yet, despite these advantages, European paging, when compared to the booming markets of the Far East and the USA, has exhibited slow growth over the last decade.

Many observers lay the disappointing development of paging in Europe at the feet of the operators. Until recently there has been little competition with many countries having only a single monopoly operator. Tariffs have been high and the service offering was complex with multiple tariffs and zone structures.

Paging was treated as a "cash cow" by operators who were reluctant to invest in new technology or undertake innovative approaches to the market. According to Nigel Salomon of new market entrant Hutchison Paging: "Paging in the UK is an under-rated technology - in the past it has been overpriced, too complicated and too inaccessible to potential users."

However, significant changes are taking place and paging looks set to experience substantial growth through to the

global paging. The International Maritime Satellite Organisation (INMARSAT) will be using its network of geostationary satellites to provide a global paging service. Targeted at the international business traveller, the service will be launched in the second half of 1994 and INMARSAT is forecasting 250,000-500,000 users within six years.

At least four manufacturers will be offering alphanumeric pagers linked to the INMARSAT service.

Radio paging has the disadvantage of being a one-way service, limited in the amount of data that it can carry.

These factors, together with the growth in the portable computer market, have created a demand for more flexible and powerful mobile data communications systems.

Mobile data was widely forecast to be a booming market but the market has been slow to develop. In the UK, excluding Cognito's specialised two-way paging service, only RAM Mobile Data is active.

There is general agreement that the mobile data market has long term potential. PA Consultants forecasts a UK market of 2m by the year 2000 and Arthur D. Little has identified 3.8m potential customers in the US.

However, as Jonathan Tartin of communications consultants EMC points out, the demand for mobile data has so far been unimpressive - "customer acceptance of mobile data solutions is relatively low due to the inability of operators to effectively communicate and market the benefits of mobile

data, relative to the costs involved.

The multiple standards used by European networks has also restricted the growth of the marketplace and prevented manufacturers from reaching economies of scale through mass production."

John E. Jarvis, chief executive of RAM Mobile Data, concedes that there have been problems in the past but is convinced that the market is now ready for lift-off - "you need five things to be right before you can achieve successful market penetration: you need coverage, you need mobile applications on host computers, you must have hardware and software connectivity tools, hardware prices must be right and the distribution channels must be in place. "These major market inhibitors are now behind us and we can concentrate on capitalising on the opportunities that are available. I strongly believe that all the bits are falling into place. We have already scored some notable successes and this stimulates the market."

One of the developments likely to affect both paging and mobile data is the rollout of digital cellular networks. The European GSM system, for instance, offers both advanced data transmission capabilities and the Short Message Service (SMS) which provides a two-way text messaging service.

Ian Gerner of Vodas sees GSM as being a great liberator for potential users of mobile data. "GSM makes entry into mobile data much easier for the customer. In the past, mobile data was hard to use, involved lots of extra wires and boxes, had poor coverage, was expensive and unreliable. All that has changed with GSM, so it lifts away a lot of the barriers that have kept people out of mobile data."

Ian Channing

Trend towards a cordless environment

Continued from previous page:

"With their intelligent network architecture and nationwide digital networks, the mobile operators will soon be able to offer all the services that a (fixed network) telephone operator can, and more," says Tim Harrabin, a principal consultant at the Cambridge-based Analysys telecoms, strategy and economics consultancy, in a recent report.

Some like Chris Gare, Mercury's manager of systems technology, believe that at

some stage before the end of the decade, office cordless and mobile digital technologies will be integrated in a dual mode handset capable of operating as a desk handset in the office and a PCN phone outside.

Business Design's Philip Ross in London believes mobile voice and data technologies are likely to be used alongside traditional hard wire cabling or new solutions such as ISDN in the short term.

But he argues that once cordless technology has proved successful, there will be a

move toward a completely cordless environment, although probably using a cabled backbone (either copper or fibre optic) as a link between floors in a building.

In the longer term, some technology strategists believe individuals, rather than machines, will be assigned a personal number which, once they have "checked in," will enable telecom services to be routed to them wherever they are and irrespective of the equipment they are using.

Olivetti, the Italian PC man-

ufacturer, has taken this concept a step further believing that its future products will converge into a system which it calls the Active Office.

Based on joint venture work with DEC at research laboratories in Cambridge Olivetti has developed a system which enables digital video and audio services to follow individuals around from room to room tracked via the infrared active badges which they wear and which send a location signal every 15 seconds to a network of sensors.

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DESK-TOP PERSONAL COMPUTERS

\$50bn world market in turmoil

LITTLE more than a decade after the first IBM PCs began to appear on desktops, the \$50bn-a-year world personal computer market is in turmoil.

Prices are falling, new and more powerful microprocessors are arriving, distribution channels are changing and the industry's customers face an unprecedented range of choices.

Meanwhile, technological advances have continued to accelerate shortening product cycles and putting tremendous computing power on the desktop. Digital Equipment's new Alpha PC claims to deliver 99 per cent of the performance of a Cray-1 supercomputer.

In the office, most PCs and desktop workstations are now hooked together in local area networks enabling them to share data and peripherals like high-speed printers and other sophisticated equipment including network fax machines, scanners and optical storage devices.

The rapid growth of PC "clone" manufacturers in the late 1980s and a wide range of second-tier or "no-name" players on both sides of the Atlantic selling even cheaper hardware using commodity components bought in South East Asia and the Far East has shaken the PC industry to its foundations.

The new competition coupled with the general move away from proprietary hardware towards open systems and the associated trend towards "downsizing" eventually forced even the older established computer manufacturers to re-assess their PC strategies and go head-to-head with their new rivals.

Over the past two years all the large PC manufacturers including IBM, Compaq, ICL and Olivetti have hit back at the clone

makers with low-price machines of their own. The result has been a wave of price-cutting as manufacturers have sought to boost market share to offset dwindling margins.

But tumbling prices, slim margins and the disappearance of customer loyalty have taken their toll. A steady stream of small and not-so-small clone makers on both sides of the Atlantic have failed or been forced to pull out of the PC market, leading to speculation that the market will be dominated by a handful of super-efficient players by the turn of the century.

Even Dell, one of the most successful of the new breed of PC manufacturers, has stumbled and been forced to adjust its strategy and undertake a significant restructuring following 10 years of explosive growth. Many other big manufacturers including Olivetti in Europe admit they do not make money on their PC business.

Some manufacturers have responded to these competitive challenges by developing their systems integration and computer services businesses, aiming to deliver to customers what Mark Churchward, divisional manager for Olivetti's UK document management division, describes as a "business process engineering approach."

Others computer groups have built strategic alliances to share costs and minimise

the risks. Nevertheless it is difficult to remain a serious player in the data processing industry and ignore the PC sector. According to Datquest, the information technology consultancy, the PC accounted for about 45 per cent of world-wide computer industry revenues last year - almost as much as mainframe and mini-computer revenues combined.

The rapid changes in the PC industry have however shifted the balance of power towards other players like Intel, the US

semiconductor manufacturer whose microprocessor chips power the vast majority of PCs, and the software companies such as Microsoft with its MS/DOS operating system, highly successful Windows "environment" and wide range of business software packages, and Novell, which sells the most popular networking software.

Over the past 18 months, Intel has delivered a raft of new processors including low power versions of its top selling chips and a range of upgradeable clock-doubled processors built around its 90486 microprocessor as well as its new high power Pentium processor. But Intel no longer has the PC processor market to itself.

New chips from its rivals, AMD and Cyrix, have added to the recent proliferation of 32-bit PC processor types. Meanwhile, Digital Equipment has delivered the first of its 64-bit Alpha AXP chips based on 64-bit RISC (reduced instruction set computing) technology and IBM has launched the first PC workstation based on the PowerPC microprocessor jointly developed by IBM, Apple and Motorola, the second largest chip manufacturer.

The first PowerPC chip, the 601, has been priced at about half the cost of Intel's Pentium processor, signalling what some believe will be the start of a 1990s "chip war" as rival manufacturers and technology battle for control of the desktop.

But do customers need the additional processing power of Pentium, Alpha and PowerPC? Mr Mike Glenon of Dataquest is in no doubt that there is a place for Pentium, the more difficult question he says is how big a place. He sees applications like image transmission, PC-based video-conferencing and high speed networking creating the demand for these more powerful processors.

PowerPC chips will be used in future generations of Apple machines but Mr Glenon is less convinced about the Alpha chip which is very powerful but expensive.

The biggest customer for Alpha outside of Digital Equipment is expected to be Olivetti which has a strategic partnership agreement with the US group. Digital Equipment and IBM also both stress that the "downsizing" trend away from large mainframes towards client-server network systems has also created the need for powerful machines which can be linked together using high speed networking technologies like ATM (Asynchronous Transfer Mode).

In its briefing paper on the PowerPC, IBM notes, "the introduction of faster and more cost-effective microprocessors means that tasks once thought suitable for mainframe and super computers can now be carried out at the mid-range and personal workstation level, allowing greater evolution of data processing down towards the desktop."

But despite the trend towards "downsizing," IBM and most independent analysts believe that the mainframe will continue to play an important role, even though, as IBM and Cranfield University School of management discovered in a study published earlier this month, many chief executives compare their mainframe to the boiler in the basement - essential but dull.

Paul Taylor

PC NETWORKS

The high cost of 'downtime'

PERSONAL computer network technology today is a mature technology, which is well-understood by the technical experts. It has also become so sophisticated that it is deceptively easy to install and, look after. The truth, however, is far from that, as some organisations are discovering to their cost.

One City of London law firm recently had its entire network crash in the middle of a working day. The network - comprising desktop PCs for more than 200 staff - ran its client files, as well as accounting and word processing. The crash meant the 150 solicitors employed could do no work.

The firm's IT consultants found that a piece of faulty applications software on one of the network server machines had been the cause. When the software was removed, the system began to function again. Nevertheless, the consultants spent most of the day trying to get everyone back on-line. In another case, a leading bank in London put all the PCs on its trading floor onto two

fault-tolerant server machines, and relied on these machines to keep the network running. No-one managed it on a daily basis, and neither did anyone realise that one of the servers had failed over until the second one also developed a problem. The entire trading floor was out of action for two working days.

According to John Godden, principal consultant with network specialist Azien, the cost of the 'downtime' in such situations can be much larger than the simple cost of fixing the system. These networks, in common with most that are being installed today, are commercially driven. They are used to support the day-to-day business functions, in a way that did not used to be the case even two or three years ago.

The old-style PC networks

gave people access to a departmental printer or fax. If they went down, people could carry on working. Today they cannot. People use their PC to log on to the network for all their software, from word processing through to databases. They also use the network to get information from software held elsewhere in the organisation - "the true cost is the cost per hour in lost business for every hour the network is down," says Godden.

Networks need to be planned differently to support the new applications, says Andy Rolfe, technical director of Logical Networks. The design should be sufficiently resilient and robust to properly support the new business applications, and the increased traffic volumes which they create - "many

companies under-estimate the complexity of the system they want," he adds.

Technically, a network consists of several "layers" of equipment and software. The bottom layer is the wiring. The comes the "pipe" - ethernet, token ring, or FDDI (fibre distributed data interface).

On top of that is the transport protocol which determines how the data will be transported. Next is the operating system, such as Novell Netware or Banyan Vines, which manages what goes where, and finally there is the applications software held on the server. To complicate matters, there are other pieces of equipment known as routers, bridges, hubs and switches, which play a part in sending the data traffic around the wires.

Some problems happen because the "pipes" installed do not have sufficient capacity, as one insurance company found out to its cost. It had tried to stretch the ethernet pipe beyond its technical limit, and wondered why "protocol error" messages kept appearing on the screens.

In other cases, the network has just grown organically, and gets to a point where it is simply over-stretched. Re-assessing the applications software may solve the problem.

One such case was the British Airports Authority resource management system. It supported 150 PCs, which log faults which occur at UK airports, including London Heathrow. It ran a PC database system, but the application was drowning the network with too much data traffic. Consultants ACT business Systems solved

the problem by redesigning the applications software to use a client-server architecture, cutting down the volume of traffic on the network.

Mike Long, principal consultant at Hoskyns, stresses that a sound network infrastructure does not come cheaply, but the long term benefits can outweigh the cost - "it must be flexible, and easy to add more people. That is a heavy commitment. For a large building, of say 180,000 square feet, and five or six storeys, the cost could come to between \$300,000 and \$750,000," he says.

But even a well-designed robust network is not trouble-free. An issue that many large organisations are now wrestling with is data management. As networks, the number of servers increases in proportion, and that creates problems

for users. They do not know where files are stored, or find that duplicate file copies do not match.

"If you have 250 users, you would have to think about controlling the data. Problems arise such as who has a copy of this document, what did they file it under, on which server," says Andy Mulholland of network services company, BISS.

Difficulties arise when two copies of the same file are held on different servers, but one

has been altered. Anyone calling up the unaltered file could unknowingly be working with out of date information.

At BISS, they have first-hand experience. The company's 200 employees all have a PC, connected to 10 servers, with 500 Mbytes of storage each. Documents transferred from one department to another are reg-

ularly re-filed on a different server under another name. The copy in the originating department does not get updated. BISS is hoping to solve the problem by replacing its 10 500Megabyte servers with two 3Gigabyte "super-servers."

These "super-servers" also have other advantages. It is easier to keep them in a single physical location, where they can be protected not only against theft, but against spilled drinks and other hazards of the office environment.

An alternative way to improve the management of the network might be to use new operating software, such as Novell's Netware 4. This has been designed to provide sophisticated data management facilities, in particular to make file access simpler. However, the software was only launched this year, and most consultants are advising people to wait until it has proved itself before they embark on a substantial installation.

Monica Horten

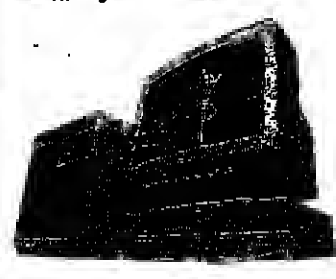
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TECHNOLOGY IN THE OFFICE 6

Electronic data interchange and electronic mail

The paperless office is almost as much a tantalising dream today as it was a decade ago. But in some areas, including the exchange of routine business documentation such as orders and invoices and electronic mail, some significant progress has been made, says Paul Taylor

ELECTRONIC data interchange (EDI) is a value-added network service which enables two organisations, usually customer and supplier, to exchange business documents using standard electronic forms and their own computers linked through a service provider.

It is often a faster, cheaper and more reliable means of exchanging information than the traditional paper-based business transaction and can play a crucial role in automating a transaction chain. EDI also automatically sets up an 'audit trail' which enables an organisation to check and validate electronic documentation. These benefits have spurred growth in the use of EDI in the US, where it originated, and in the UK and the Netherlands which lead Europe in EDI usage.

Ovum, the technology con-

sultancy, expects the EDI market in Europe, including customer software and support, to grow from about Ecu 196m in 1992 to about Ecu 588m in 1997, a compound annual growth rate of 24 per cent.

"The EDI market in Europe continues to grow steadily," Ovum noted in its latest report on the European Vans market, "most large organisations are now using, implementing or trialling EDI." However the report also notes that small and medium-sized enterprises (SMEs) are showing much more resistance than was expected to the adoption of EDI.

Nevertheless, as an increasing number of smaller suppliers have discovered, big companies are beginning to demand EDI links with their trading partners. This, in turn, fuels the growth in EDI trading as more organisations gain direct experience of the benefits.

Ovum notes that the majority of EDI traffic today is based on industry specific application protocols. However, the report forecasts that "virtually all new user-communities are basing their services on Edifact (an international standard) - and many existing communities using proprietary applica-

tion protocols are moving towards Edifact."

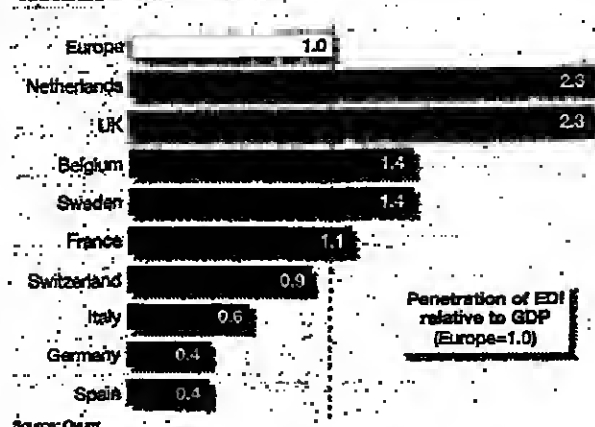
By 1997, Ovum predicts that 90 per cent of EDI traffic in Europe will be based on the Edifact standard.

The UK and the Netherlands are by far the most mature EDI markets in Europe followed by France, Sweden, Switzerland and Belgium which are 12 to 24 months behind, then Germany, Italy and Spain which are about three years behind according to Ovum.

Among the service providers the market leaders in Europe are IBM and Geis which have pan-European networks and services and International Network Services (INS - jointly owned by Geis, the US-based network services company, and ICL) which dominates the market in the UK with an estimated 55 per cent market share.

Other service-providers in Europe include Unisource, a joint venture between the Dutch/Swiss and Swedish telephone network operators, BT Global Network Services and France Telecom/Transpac which are aiming to build up a European-wide presence. AT&T Easylink which has a significant position in the UK and is now expanding across Europe. Intesa, a joint venture between

Relative use of EDI



Fiat and IBM, has an important position in Italy while Silegos is the market leader in France.

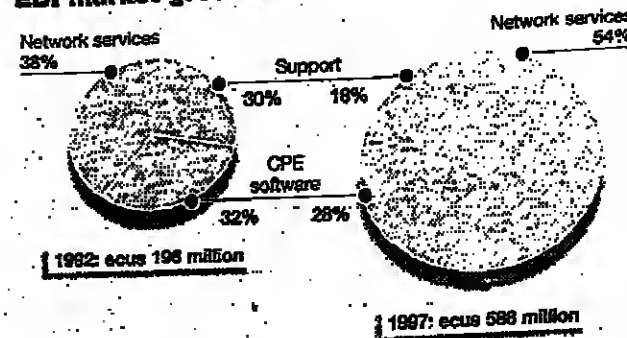
In the UK, competition between the three main service suppliers is intensifying and last year IBM, AT&T and BT announced inter-working between their networks in an attempt to isolate INS which provides three main EDI 'communities', INS-Tradanet, the main service for retailers and their suppliers, Brokernet for the insurance sector and Fleetnet for the fleet leasing-management sector. The biggest, INS-Tradanet, handles more

than 6m documents a month.

Companies use these EDI service suppliers because they provide a central 'post office' function, directing message traffic to the appropriate recipient and providing any 'data translation' needed between different computers or message standards.

About 10,000 companies and other organisations in Britain are estimated to be using electronic trading and the number is growing by between 20 and 30 per cent a year. But there is still much room for growth. Some recent estimates have suggested that less than 5 per

EDI market growth



cent of business transactions in the UK are handled by EDI. Of the top 1,000 companies, roughly 300 use EDI.

As Sir John Harvey-Jones noted at the Electronic Business Exchange conference held in London earlier this year, "against the potential of both the number of firms and the uses that could be made of electronic trading, we are barely scratching the surface."

Tesco, one of the pioneers of EDI use in the UK, has automated its entire transaction chain of recording sales, amending and checking stock records, re-ordering goods, receiving and checking invoices and making payments. The benefits of EDI have been so great over the last six years that the supermarket chain has stopped measuring them against the costs.

Tesco now trades electronically with over 1,200 companies of all sizes, representing more than 95 per cent of products on its shelves. Half these suppli-

ers send their invoices to Tesco by EDI. Other big EDI users in the UK include ICL, the computer group, Nestle, Colgate-Palmolive.

EDI users are also becoming increasingly sophisticated. Originally, EDI tended to be used only for basic transactions such as ordering and invoicing. However, as familiarity with electronic trading has grown, so has the range of information transmitted over EDI links.

Tesco now exchanges 13-week sales forecasts with a quarter of the 1,200 suppliers which trade with it electronically to help them schedule production and reduce stocks - thus keeping their own costs and prices down.

EDI is also being integrated with existing internal electronic mail systems and other computer applications. Using EDI in this way enables a customer to link two or more incompatible email systems, for example in different departments or divisions of the same company, or to build an "electronic bridge" between email systems following a merger or acquisition.

Unlike EDI, electronic mail is a non-interactive service based on sending computer-generated messages across a telecommunications network. In Europe, electronic mail is already a significant and fast expanding Vans market. Ovum estimates that service providers earned Ecu 176m from e-mail services last year and will earn almost Ecu 1.5m by 1997.

The largest share of the market (8 per cent) is held by BT GNS, followed by IBM, Unisource and Geis. Ovum has identified seven other smaller market players including AT&T Easylink, Mercury and Sprint which are earning at least Ecu 5m from e-mail services in Europe.

According to Ovum, single terminals connected directly to public services account for almost 90 per cent of current e-mail traffic but by 1997 Ovum estimates this will have dropped to 20 per cent with the remainder accounted for by gateways to private e-mail systems.

In the UK, e-mail usage is growing rapidly partly reflecting the introduction of new value-added services like Mercury's Multimessage facility which provides an integrated approach to sending a single message to any combinations of fax, telex and electronic mail addresses together with other special features like automatic redial and deferred transmission.

Takeo together with EDI, electronic mail is helping to redefine the way businesses trade and communicate with each other, and the office is at the centre of this new system of "electronic commerce."

GROUPWARE

An aid to teamwork for PC-users

The price of groupware has put off many companies, but increasing competition will bring the cost down, says Boris Sedacca

THERE was a time when companies avoided making any significant investment in a new technology until IBM entered the market to "legitimise" it. Today, nobody waits for IBM anymore and this is particularly evident in the workgroup computing/groupware market.

This is not to say that IBM does not have groupware products, because the company announced a number of product enhancements in the groupware area, earlier this month. However, IBM is unlikely to emerge as market leader in groupware as it has done in the past with products like the PC.

Groupware is a software environment that aims to make teams of PC-users work together more efficiently. It updates colleagues on new developments, and is similar to a central "hold" for information, where files, diaries, memos and other office documents are stored, easily amended and accessible to anyone.

With groupware, work is not held up because someone else has the file, or has forgotten to add new information.

Lotus was first to enter the groupware market with its Notes package, but initial take-up of the technology was relatively slow because it involved large-scale investment and required an IBM OS/2-based server system.

Although Lotus makes most of the running in the market, there are numerous disparate products which, it could be argued, already fall into the groupware category.

Apart from Lotus and Microsoft, two other leading PC software vendors - WordPerfect and Borland - have jointly announced groupware products, although the forthcoming WordPerfect Office 4 looks set to compete independently. ESP is another company specifically targeting the groupware market with a range of third party software products.

Most products centre on a mail engine. Novell, for example, is talking about workgroup computing in terms of its global messaging service. A "mail engine" is essential for people to work effectively in teams together.

Alan Harris, associate partner at Andersen Consulting believes there is still room for an outsider to come into the groupware market and then play a dominant role by establishing the rules of play.

"It is going to be somebody who comes up with a framework to understand how groups can interact," he says.

"The biggest gap is in the lack of a telecoms infrastructure. If you really want to get groups working together, they have to be free to do it from wherever they are. At the moment, there are too many compromises made because of

the lack of a telecoms capability.

"You cannot really participate if you are on the move," he says. Most applications are designed to provide good performance in a local area network (LAN) but do not work well on anything slower - "groupware is an application idea that is waiting for the data highway to come along."

For businesses to succeed with the new way of working with groupware, they need to be able to create groups across dispersed geographical locations throughout the enterprise.

Alan Harris believes that telecommunications suppliers will emerge as contenders by teaming up with software vendors.

PA Consulting recently completed a survey of groupware and information sharing. John Kay, director of management and professional systems at PA Consulting, says: "We were concerned that although groupware has been much touted, the chasm between IT and the business is not narrowing."

THE survey sample consisted of around 100 senior managers in IT, finance/accounting and marketing in large private sector companies. Eighty per cent acknowledged the importance of information sharing, while 65 per cent did not like the way IT presented its solutions to the business.

Eighty-six per cent did not think the time was right to act on information sharing and groupware. Some responses included comments like: "Groupware is a fad," and "I'm not interested in groupware - I always get my IT people to deal with it."

Only 13 per cent thought they were getting any benefit from what they had done in the groupware area.

"Groupware is another packaging of technology concepts which have been around for a long time," John Kay adds.

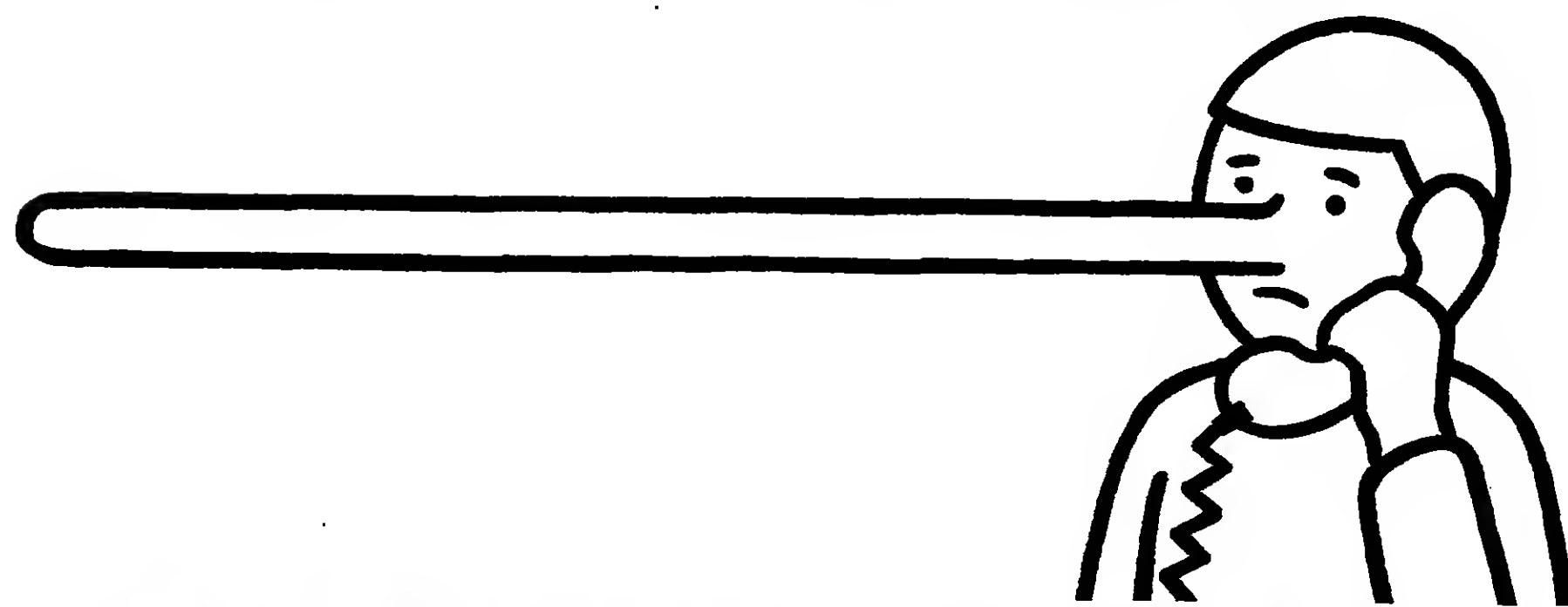
Business managers do not naturally think of IT as a solution to their work problems at the tactical level, he says - "there is no doubt that they all have an IT strategy and know how important it is to link it to the business, but when sales or marketing managers run into problems, they do not naturally turn to groupware for a solution."

The price of groupware also puts many companies off, although increasing competition will bring the cost down. Lotus Notes Version 2 had a hefty price tag, comments Niels Jaekel, manager of the desktop consulting group at Hoskyns.

"Version 3, which has now been released in part, will be cheaper. One of Notes' prob-

Continued on facing page.

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TECHNOLOGY IN THE OFFICE 7

Document image processing and data storage

Smarter ways to store documents



Mr Geoff Bader: the emphasis is on improved efficiency

THE financial services industry churns out endless reams of paperwork, particularly in the insurance and mortgage sectors.

These are the areas, however, where the bulk of applications can be found for document image processing (DIP). Apart from improving customer-service efficiency, the industry is also beginning to use DIP technology to cut staff, according to Geoff Bader, consultant at the finance division of the Computer Management Group (CMG).

"If you talk to financial organisations, they will mention the two points in the same breath. In practice, the emphasis tends to be on improved efficiency," he says.

Unlike the computer industry which is increasingly moving towards standards, DIP is still a jungle of proprietary systems.

There are some standards at the lower levels of DIP technology, such as the fax format used for the images, but when it comes to the software that does clever things like indexing, it is still a case of "everybody for themselves".

So when customers choose a particular supplier, they have to be sure from the outset that they will not want to switch suppliers later because they will be well "locked in" to an original supplier.

Most imaging systems now store images using the Group 4 fax standard from the Consultative Committee for International Telegraphy and Telephony (CCITT), which provides better image compression than its Group 3 predecessor.

"That is really all a fax does - like an imaging system, it turns a document into a series of digits," explains Mr Bader.

"The main problem with standards is how you actually 'reference' an image on a disk. Every supplier has a different indexing approach. In principle, it would be quite simple for somebody to convert images from one system to another by turning them into faxes - say, through a PC fax card."

Most DIP systems scan images at a resolution of 200 dots per inch (200 dpi). An A4-page scanned at this resolution in monochrome generates about 4m pixels, occupying four megabits of storage,

resolution from 200 dpi to 400 dpi, the print resolution offered by most laser printers, quadruples the storage required in theory, although the more data is captured the more redundancy it contains, so the compression algorithm tends to be more efficient. In practice, therefore, the storage requirement would only double.

"TIF in itself is still only effectively an image format," says Tony Hendley, technical director of Cimtech. "You still need to describe your definition of a document within the system. That's where you get into the realms of document architecture standards."

The large computer manufacturers such as IBM and Digital Equipment (DEC) have defined a standard called Open Document Architecture (ODA). This allows users to manage documents in a range of formats.

Most word-processors use IBM's Document Content Architecture (DCA) as an interchange format for exporting documents to other word-processors. ODA is the counterpart to DCA for document imaging, but still has some way to go before being universally adopted as a standard to replace proprietary architectures in DIP systems.

THE move to client-server computer architectures means that DIP systems can now have one server managing the index database and another managing document contents, be they images or text files. This will improve performance because the types of searches done on the index database are different from those done on the storage server.

"The best analogy is that of a hat-check system where you give your coat to a cloakroom attendant and you get a ticket with a number on it. The attendant does not know what the

coat is or anything about it, and they store it as they see fit," explains Mr Hendley.

The storage server operates on that principle. At any point in time, the index database will deliver a series of tickets as a result of a search, and the storage server will deliver the file.

"The benefit of having them as separate devices is that you can have many companies who specialise in making storage management systems which optimise the trade-off between storage cost and speed of retrieval."

He recommends that users carry out some form of data modelling exercise in advance or use free text indexing systems. Alternatively, they can create an abstract of the document.

If the document is held as a text file, the user can search on any word in the document itself. Whether the user has come through a structured search or a free text search, the principle is the same - the result is a list of unique numbers from which to retrieve files.

"Most imaging systems use a standard database such as Oracle to hold their indexes," says CMG's Mr Bader.

"The fact that it is pointing to an image is where the clever software comes into play. Image is a technology which appeals to users, rather than IT buffs, but ironically users see it as something which enables them to automate their processes and bypass traditional IT professionals."

Optical character recognition is now becoming more prevalent because the system can then recognise part of the image as being characteristic of the document, providing automatic indexing - this is particularly useful in legal documents, for example.

Boris Sedacca

PORTABLE COMPUTING

Small is beautiful

Almost one in five of all personal computers sold last year was a portable - and the trend is accelerating, reports Paul Taylor



Windows 3.11, a financial services company, sells its products through a direct sales force of 270 full-time agents. They use a sales automation system, called Wings, which supports the complete sales cycle "from prospect to policy". The system, run on Toshiba portable PCs - the colour T3205XG, shown here - can be electronically linked to head office, giving the company a rapid communications channel for everything from head office memos to new product rates

IN the early days of portable computing, strong arms and a large dose of determination were required. Machines were heavy, cumbersome and generally slow and unexciting. But, since then, silicon integration and other technological developments have enabled portable computer-makers to pack real processing power into ever smaller and less costly packages.

Although portable computing is little more than a decade old it has changed dramatically in recent years. The "clamshell" notebook computer has become the *de facto* standard for portable computing and the fastest growing segment of the world computer market.

Almost one in every five PCs sold last year was a portable and the trend is accelerating.

Dataquest, the market research organisation, estimates that worldwide notebook computer shipments, led by manufacturers such as Toshiba, Apple, NEC and Compaq, more than doubled last year to 4.55m units. By 1997, Dataquest expects portables and the new generation of personal digital assistants (PDAs) to account for more than 45 per cent of unit sales.

Although portable machines still command a price premium over their desktop counterparts, fierce competition is eroding the difference and providing consumers with an ever widening choice. Almost every serious PC manufacturer and most of the "clone" makers now supplies at least one range of notebook computers - many have high and low-end ranges - and as a consequence prices have been falling rapidly.

Today, many models boast high resolution colour displays, large 120Mb-plus hard disks for data storage, integrated trackballs for mouse-style pointing under Microsoft

Windows and at least one PCMCIA card slot to connect peripherals like modems for data communications. While machines based on Intel's 386 processor are still dominant the market is a growing number of new machines are based on the more powerful 486 processor.

Low-power chips, like Intel's 586, together with advances in screen and battery technology have enabled designers to build machines with brighter displays and longer battery lives while new lightweight components have enabled manufacturers to deliver most if not all the functionality of desktop systems in much smaller boxes.

Generally notebook computers are used in addition to desktop machines, and sometimes as replacements. That means most corporate users want machines which offer similar facilities to desktops and are able to run the same software. However, despite significant advances in screen technology, few portables can compete with the displays found on most desktops.

One increasingly popular solution to this issue is the

"docking station" which enables the portable to take advantage of facilities like full size screens and keyboards and to connect to an office local area network which then provides access to databases and peripherals like printers.

Several large manufacturers now produce docking systems including Compaq and Apple whose Duo system combines a lightweight 4.5 lb notebook computer for use on the road with a docking station which turns the machine into a sophisticated desktop, linked into the office network.

For many users, notebook computers are now an important element in the "mobile office" although most studies show that portable computers are only rarely used while actually travelling. Equipped with a fax-modem and perhaps a portable printer they can be used to send and retrieve data, electronic mail and facsimiles from a hotel room or local office.

Some manufacturers have begun to design in specific features for the travelling businessman. For example, Canon's BN22 BJ incorporate a bubblejet printer; meanwhile,

Toshiba has recently launched the T6600C which includes a CD-Rom drive, stereo speakers, detachable keyboard and other facilities to make multimedia presentations while travelling. At 13 lbs, it is heavy in comparison with today's notebooks, but actually weighs less than Toshiba's top of the range laptops of just a few years ago.

Other innovative machines to appear on the market recently have included modular designed systems from Eikon, the North London-based computer group, Japan's NEC, Acer with the Acernote 750c and Italy's Olivetti with the recently launched Philos. Manufacturers argue that these modular designs enable customer to keep up with future technologies and provide users sharing machines with additional flexibility.

Most new portables feature integrated trackballs introduced by Apple which has had achieved considerable success with its PowerBook systems which were among the first notebooks with an integrated trackball - a feature which is increasingly common. Apple sold over 500,000 PowerBooks, worth more than \$1bn last year.

Another innovation in portable computing over the past couple of years has been the arrival of pen-based "notepad" systems which are now available from a growing number of notebook manufacturers.

To date, pen-based systems, including smaller handheld devices, have mostly been used for niche applications, for example by insurance assessors and engineers completing customised forms on site, warehousemen checking stock or for data collection. Often these machines are linked by radio data communications back to head office so that data can be transferred to and from the main database.

Some manufacturers have sought to combine the benefits of pen systems with the attractions of the conventional keyboard. For example the Grid Convertible, now supplied by AST alongside its new ranges of high and budget-priced note-

Continued on page nine

Robert Halliday looks at ways to cut back on printed documentation and reduce costs in the electronic office by using new software packages

A chance to reduce the paperwork

ONE of the biggest myths of the early years of the information technology revolution was that the use of computers would lead to the end of the use of paper for communications. At the start of the "paperless office".

It is now clear that this paperless society is, at least so far, a myth. New technology has actually led to an explosion in the use of paper: the page design tools on personal computers allow anyone to create good looking documents, but the urge to get the design just right by tweaking tiny details mean that several draft copies may be printed where one typed memo would have sufficed.

Then, once finalised, the document may be faxed or posted to different sites, where it will be copied several more times for distribution and filing.

The disadvantages of this system are quite obvious: firstly, contrary to current ecologically-friendly trends, a large amount of paper is used. Secondly, the costs of copying and transmitting the document can be huge and, despite the care taken with the design, the quality of the received document (once it has been faxed, then photocopied, then comments added, then faxed back) can be unpredictable.

Thirdly, though by no means finally, if the recipient wants to take sections from a document to incorporate into

another document, they cannot do so without re-entering the data into their computer.

Yet while distributing such documents as computer files, either down telephone lines or on disc, clearly solves many of these problems, this method has never become popular. This is mainly attributable to the difficulties caused by the different data formats which each computer and program uses.

Transferring plain text, the lowest common denominator of the different machines, has always been possible, but sending complex documents, containing text in different sizes and fonts placed around pictures is very difficult unless the sender and recipient have exactly the same software packages and fonts installed on their machines.

In some organisations this has led to packages being copied illegally just so that everyone could read electronically distributed documents.

Two new software packages aim to solve this problem. Both "Common Ground" from No Hands Software and "Acrobat" from Adobe Systems claim to allow documents created with any application program, and

incorporating any combination of fonts, graphics and colour, to be sent electronically to other users' computers and viewed on-screen.

The sender and recipients need not have the same applications or fonts installed, nor even be using the same type of computer - both products allow documents created on Apple Macintoshes to be viewed on personal computers running Windows, and vice versa. Adobe is also working to bring users of DOS PCs and Unix machines into the Acrobat world.

Both systems appear to operate in the same way. Once installed, they add an option to the print command to print the document as a special format file, called "digital paper" (dip) in Common Ground and "portable document format" (pdf) in Acrobat.

The files, which preserve the look of the original document, can be distributed on disk or by modem, and be read on-screen using a viewer program - Common Ground even allows a mini-viewer to be included with a document, so that anyone can read it.

Once opened, the document can be searched for words or phrases, and sections of text can be copied to other documents.

Acrobat adds further facilities like "sticky notes", the electronic version of the familiar Post-it note, and hot links where selecting a phrase like "see the attached graph" would take you directly to that graph, and will eventually support the standard SGML document structure system. If green-consciousness permits, both systems allow documents to be printed.

Beneath the surface, however, the two systems differ greatly, in ways which affect both the quality of the documents when printed and their file size. Common Ground files contain a bitmap image of the document - a "dot by dot" copy of the on-screen image. When creating the digital paper file, the resolution can be selected to be 72 dots-per-inch (about the same resolution as appears on computer monitors) or 300 dots-per-inch (standard laser printer resolution).

The 72 dpi files are smaller, but appear ragged when printed or enlarged on screen; the larger 300 dpi files give much clearer results.

The technology behind Acrobat is much more complex. The portable document format is an extension of Adobe's established PostScript page description

language most familiar from high-quality laser printers. Rather than creating a bitmap copy of the document, Acrobat stores the "metrics" of the fonts used.

Using the company's "Multiple Masters" font format a system where one font can be stretched and distorted to give many variations of the design the receiving system generates close copies of the original fonts.

Though it has problems with highly decorative typefaces, the advantage is that the resulting fonts are resolution independent if you print them on a high quality laser printer they will appear at the resolution of the printer, whereas those from Common Ground would be stuck at 300 dpi.

Acrobat also offers a number of compression systems to reduce the size of pdf documents, which is advantageous since it reduces both telephone transmission times and storage requirements; in some cases, 2Mb files can be reduced to around 100K.

However, documents cannot have a view included - to read a document you need an Acrobat Reader, and these are only currently available in minimum quantities of fifty, priced at \$36 a copy.

"Exchange," the program which creates pdf files, costs \$140 per copy; and "Distiller," which takes existing PostScript files and turns them into pdf format, costs \$500.

Repeated drafts of desk-top designed memos all add to the paper mountain

"Common Ground," in contrast, costs just £149 for the Maker/Viewer. The two systems will however, find favour with different markets. Common Ground being ideal for distributing small-scale documents while Acrobat is more adept at large works containing extensive cross-referencing or full colour images.

Providing recipients avoid the urge to simply print-out documents, both systems will reduce costs and paper usage greatly. And while neither is yet perfect, both give the "paperless office" concept a new chance.

Acrobat is from Adobe Systems, distributed by Printhead Systems (0706 831 831); Common Ground is from No Hands Software, distributed by Gomark (071 731 7330).

Around the world in easy ways

As Britain's largest car exporter, the Rover Group needs to keep in constant touch with its world-wide network of sales companies, dealers and distributors. Building close and effective communication with more than 150 distributors around the world, outside Western Europe, poses particular challenges.

Varying time zones, cultural differences and national public holidays mean that telephone communication is often a hit or miss affair.

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Groupware benefits

Continued from previous page.

lems in the past is that it required OS/2, whereas the majority of sites have Microsoft Windows," he says.

Lotus has only recently released a Version 3 Windows development server product, he adds, "but it is not entirely suitable for services because Windows is not a pre-emptive multi-tasking environment like OS/2."

"What that means is that it does not switch from one task to the other mechanically but through something called co-operative multi-tasking, which means that the application has to release control to the operating system."

A pre-emptive environment means that the server gets a specific amount of time to do its job.

Under Windows, if anything else is running, then the server may not get its fair share of work, and perfor-

mance will suffer.

However, the forthcoming release of Windows NT will probably solve that problem as it uses a pre-emptive approach to sharing out processing time.

According to Niels Jaackel, Microsoft has a more powerful set of language tools in its groupware products than Lotus which uses a macro scripting language in Notes.

He comments: "The edge that Microsoft has is that those language tools will be embedded into Windows 4.0, the next release of Windows for PC clients, which is also a 32-bit pre-emptive multi-tasking operating system."

The transition to Windows NT server will be very clear, he believes, "until the transition from Release 3 to Release 4 of Novell Netware which has totally confused users, or from Lotus Notes 2 to Notes 3 where substantial changes were made."

TECHNOLOGY IN THE OFFICE 8

PRINTERS AND COPIERS

Many of today's photocopiers and printers act as one - at the touch of a button, reports Julie Harnett

Surge of new products

The transition to the all-digital office is gathering pace. Not, as we were once led to expect, to get rid of paperwork but to produce better-looking documents, faster and cheaper, on demand at the point of need.

It is not such a long leap into the dark unknown for the modern copier as some may think, for it already uses 10 or more microprocessors and software programs wisely and well to make an amazing array of facilities available at the touch of a button.

Fast scanning, infinitely variable zoom, automatic double-sided copying at full engine speed, job programming with memory retention and self-diagnostics are just some of the state-of-the-art features that can be accessed via graphical display or touch-sensitive screens.

In fact, the technology has advanced to the stage where every office junior in the land could take a set of originals and, with a modicum of training, produce reports, booklets or manuals, stapled complete with colour covers and dividers, in less time than it takes to place an order with a printshop. No wonder suppliers such as Canon, Infotec, Konica, Lanier, Minolta, Mita, Nashuatec, Océ, Olivetti, Panasonic, Rank Xerox, Ricoh, Sharp and Triumph-Adler have all recently launched medium-speed systems machines for the office market.

Questions are being raised in centralised print departments about the need to produce intermediates, which is both time-consuming and wasteful. If the majority of originals are created on a computer, users argue, would it not make economic sense to send the images direct to the copier electronically?

According to Kodak research, 70 per cent of UK business and public sector organisations believe that, where the key requirements are low cost, fast turnaround times, dependability of time-sensitive information and efficient use of space, a copier to computer or network link is



In-flight printing: the new Citizen Notebook Printer II is claimed to be the only portable printer capable of colour printing and is perhaps the smallest colour printer in the world. It sells for around £349, plus VAT

important. Hence the company's decision to add the new Kodak 1680 copier-printer to its Lionheart programme in the first quarter of 1994.

Océ is also moving towards the Digital Repro Centre ideal with a software solution that integrates existing analogue copiers, laser printers, scanners, computers and applications to provide interchangeable and updatable packages that will enable the repro department to grow from present hard copy reproduction to the benefits of fully-digital working methods at their own pace and within what might be very tight budgets.

Commercial Union can already testify to the benefits of digital technology when compared with traditional offset presses. Ray Thorn, manager of group supply, says: "Using the Xerox DocuTech to produce 500 prints will see the job printed and finished before the press would have been ready to start."

To CU's marketing department it is image quality that is crucial, so they have been chosen to run a pilot where they will be able to eliminate intermediates by linking their desktop PCs or Macs to the Medi-

aServer via a modem for direct input.

Digital offset. The offset press is not dead yet, though, and for long-run colour-work at a low cost per copy it still has no equal. The launch of the Indigo E-Print 100, the world's first digital offset colour printer which combines the performance and image quality of liquid ink with digital imaging and electronic paper handling, proves that it, too, is being given a new lease of life.

The digital duplicator. The duplicator, too, is alive and well and embracing digital technology to eliminate messy manual processes. With costs per copy on print runs of 24,000 copies per original at less than one-third of a penny, the economics speak for themselves in schools and colleges where electronic copier-duplicators from Gestetner, Infotec, Ricoh and Riso are finding favour. The ability to link the machines directly to a PC or MAC for direct image input further enhances their value in terms of investment futures.

Multifunction desk-top. Integrated digital solutions for general office use have been hovering in the wings for sev-

eral years but the high cost when compared with the products they replace have not made economic sense to purchasers. Marketing directors at Canon, Konica, Ricoh, Sharp and Toshiba have all commented on the fact that although 35 per cent of the Japanese copier market is already digital, it will represent no more than 5-10 per cent of the UK market for at least two years.

Richard Norton, vice president, Worldwide Document Management Group, Dataquest, the market research company, agrees with that view, but cites several new developments that will help to make the all-digital office a reality. One is the Oki DOC-IT, a small desktop unit for personal use costing from £3,000 that combines image scanning, plain paper fax, copying and page printing. A network version is planned. Mid-range multifunction devices worth noting, he says, include the Ricoh 5330 and the Canon GP55.

Digital colour. Could 1993 be the year that colour takes off? Perhaps. European research carried out by BIS Strategic Decisions shows that unit sales of colour cop-

ers, now at just under 35,000 units, will grow at the rate 20 per cent (CAGR) through to 1997. Canon was the first to break the price barrier with the launch of a digital colour copier-printer based on bubble-jet technology at under £4,000. Olivetti, too, has entered the market with the Colour 8000 at £3,795 which divisional manager Alistair Booth believes will be used primarily as a PC printer.

Colour laser printers, says BIS, will grow much faster than colour copier, with unit sales rising from 130 units in 1982 to 32,500 in 1997 (104 per cent CAGR 1982-1997). It could be higher if the QMS ColourScript Laser 1000 and the Océ 6460 desk-top machines (priced at around £10,000-£11,000) are joined by lower cost units from suppliers such as Canon and Hewlett Packard.

Cost because of much lower price of colour inkjet and the ability of the technology to be adapted for printer and copier use, sales across Europe are likely to outstrip any other product type, BIS predicts, with units shipped rising from 442,000 in 1982 to 3.35m in 1997.

Colour inkjet printer-only devices that have broken the mould include Hewlett Packard DeskJet 1200C and 1290CPS, which came in at around £1,400, followed more recently by the Canon BJC-600 at £599, plus VAT, both bringing to the masses the essential combination of affordable plain paper full-colour and true black.

Competing in this market are four-colour thermal units, and here the innovations possible are epitomised by the Star SJ-144, a three-page per minute printer offering zoom magnification priced at a low £569 and which won the Best of Comdex award this year.

At the higher end of the market where the quest for perfect colour matching and colour registration is crucial, one of the most important developments is the range of EFI (Electronics for Imaging) colour management products which can turn a digital-colour copier, such as the Canon CLC, Kodak ColorEdge 4100, AgfaX300, Minolta CD-80 and the Rank Xerox 5775, into a multifunction copier-printer capable of producing very high quality colour output. The need to develop anti-counterfeiting technology, however, naturally adds to the cost.

The colour copier-printer market certainly looks set for some excitement as innovative products like the Rank Xerox Majestik, with its auto colour sensing capabilities, stretch the technology barriers. Capable of accepting images from a variety of sources, including computers, scanners and photo CD systems and due to be launched in the first half of 1994, it has already created a storm in Japan by capturing 42 per cent of the digital colour market.

Developments in copier and printer technology are, then, still growing apace, with computer networking, PC interfaces, digital imaging and electronic paper handling enabling users to tap into any one of the technologies available on the network, choice only depending on their current application.

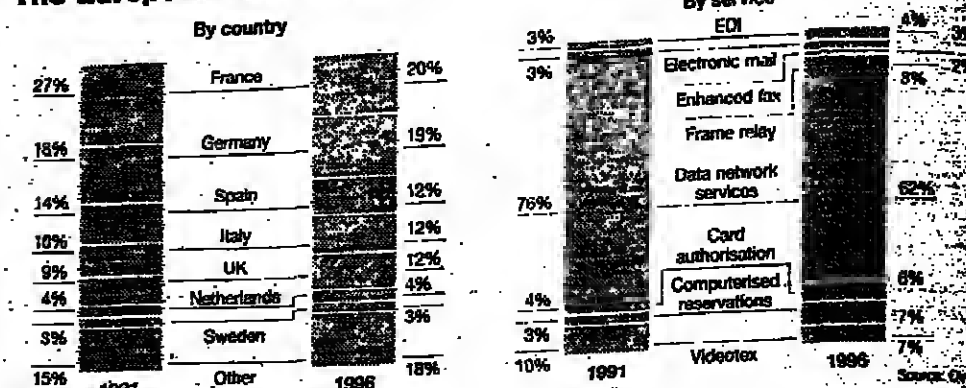
Users today do not even have to worry about configuring a printer to suit their requirements. Automatic interfaces switching enables printers to accept data from multiple sources without manual intervention. Automatic emulation avoids the user having to specify a particular computer language. Simultaneous processing of multiple jobs increases throughput.

But what if, as a computer user, you have to work from other locations and your print jobs are particularly complex? Does it mean that you have to spend ages to reconfigure each printer you use?

What if you use a multifunction copier-printer that has been physically switched from one function to another and need to access it from a remote location?

No problem, says Bob Anderson, director of the Xerox Research Centre at Cambridge Laboratory. In future, you will only have to configure your digital copier or printer once. After that, wherever you are located, be it home, a branch office or overseas subsidiary, as soon as you log on to the network, your printer configuration will automatically search you out without you having to do a thing. That, says Anderson, is what printing on demand at the point of need is about. Do you have the feeling that business equipment is getting too clever for its own good? Have no fear, sales of copiers and printers proves that paper is here to stay for many years yet.

The European Vans market



FACSIMILE SYSTEMS

Now the lines are busier than ever

THE European facsimile market is holding its own, according to market research company BIS Strategic Decisions, with unit sales forecast to rise to over 2.5m in 1995, which represents an 8 per cent CAGR over the 1991-95 period. However, the market value is expected to decline as a result of lowering prices to US\$2.5bn in 1995 from the \$2.6bn high in 1991.

There is no decline in revenues for the network operators, though. The 1993 Pitney Bowes/Gallup survey of UK FT 1000 companies shows a jump of 61 per cent in the number of outgoing faxes in the past year, with the daily average per business rising from 40.3 documents of 3.6 pages to 65.1 documents of 5.1 pages.

The survey also found that the number of fax machines in FT 1000 companies has almost doubled, from an average of 6.5 units per company in 1992 to 14.5 in 1993.

All surveys note the trend towards more sophisticated features and plain paper fax (PPF) with BIS estimating that the PPF share of the European fax market was 9 per cent in 1991 (19 per cent by value) but will be 45 per cent (72 per cent by value) by 1996.

According to Dataquest research, 53,000 PPF units were shipped in the UK last year, with the figure set to rise to 177,000 by 1997, an annual growth of 35 per cent. A \$5m order placed by British Gas for a new fleet of Rank Xerox plain paper fax machines would appear to add weight to the prediction. Inkjet technology will, however, experience the strongest growth, with unit sales expected to grow from 20,000 units a year now to 76,000 by 1997. The early success of the Canon B200, which came in at under £500, appears to prove the point.

Gunning for the same market seven months later is Olivetti with the OFX2100, a sub-£500 unit which has the added advantage of a PC interface. Those launching inkjets at around £1,285, Infotec, Panasonic and Ricoh among them, tend to be targeting the business rather than the mass market, where fast response after sales service is considered a more important criterion than price per se.

Increased competition from new technologies should mean that toner-based PPF fax will either come down in price or will boast more sophisticated features designed to save operating costs or improve image quality at the same price. These include faster speeds, higher resolutions, larger memories, dual or multi-access facilities and, like the newer inkjets, PC or network interfaces. As one might expect from a company that commissioned the Gallup research, epitomising the trend is the new Model 9540 PPF machine from Pitney Bowes which is priced at £2,735 plus VAT and comes with a fast 14.4Kbps modem, 620K memory, extra fine resolution and RS232 interface.

Computer fax

Users are still cautious about PC fax, it seems. Dataquest says less than 5 per cent of PCs and LANs have on-board fax facilities. The Pitney Bowes/Gallup survey shows a rosier picture for FT 1000 companies, with 24 per cent of users sending faxes direct from their computers, although 38 per cent do use a computer equipped with a modem.

Peter Champion, market development manager, Ascom Data Networks, an established supplier of computer fax, believes that the slow take-up is largely due to a lack of user-friendly software applications and ignorance on the part of business users.

The software developers are getting there, slowly, with the help of Windows-based software. Current favourites among the fax/modem suppliers such as Dataflex and US Robotics who supply a total package is Delrina Winfax.

Word-processing users would much prefer faxing to be as easy as printing from within

the application; hopefully the inclusion of fax communications in the new 6.0 versions of WordPerfect, due out soon, will set a trend and encourage greater use in offices where the large number of fax messages are generated.

Dataquest believes that the one the networked PC community should watch for is Microsoft at Work which, although at least a year away, will make fax, copying, printing and voice a standard combination on all desktop systems.

Portable fax

Although Ricoh and NEC are winning sales for their mobile fax machines, and Canon has a baby mobile fax in the wings, it still appears to be a niche market. However, portable PC fax looks set for take-off, with an informal Dataquest survey

In the European fax market, suppliers of low-cost consumer machines will continue to win the lion's share of unit sales

finding that a LAN-adaptor is the top priority for users, facsimile second.

The spur to market growth is likely to be the advent of PCMCIA (Personal Computer Memory Card Industry Association) standard fax/modems which are credit-card sized. With the market forecast to grow six-fold and 400 hardware and software suppliers committed to the standard, we can expect a flurry of activity soon. But first on the market with PCMCIA fax/modems for mobile cellular and public phone networks are US Robotics and, soon, Nokia/AT&T.

Multifunction fax

Ownership of fax devices in the home jumped dramatically last year, according to BIS, with over 47 per cent of home office and 89 per cent of work-at-home users purchasing devices in the past year.

Main suppliers in this market are Muratec, Ricoh, Samsung and Toshiba. Innovations such as large memories, polling from remote machines and paging with phone-answering, as found on the new under-£500 Brother 360DT, should boost the market further.

Those on a budget looking for a page printer, a plain paper fax, PC fax and scanner may well look to combination products. Typifying the genre, the Muratec F-75/Laserfax which can be used as a hard copy fax (£1,995) or as an image scanner and as a DOS/Windows compatible PC system.

Group 4 fax

The arguments about the re-

active merits of the Group 4 standard versus Group 3 continue, although little if anything has been heard of Group 3bis, the 64K fast fax contender.

Suppliers such as Infotec and Ricoh claim that this is not surprising since the uptake of ISDN digital lines from BT and Mercury for head office to branch communications is resulting in steady, though not euphoric, sales of Group 4 machines.

With approximately 2,000 companies using ISDN channels (300 per cent up on last year), the potential savings in time, and thus in transmission costs, are being recognised. In the UK, HM Customs & Excise, for example, has placed an order for ten Canon L3300 Group 4 fax machines for its regional offices.

Companies who want to benefit from the savings in transmission costs between the UK and US but do not have the constant volumes to justify purchasing the equipment can now benefit from the first 64 fax service which has been set up by Infotec for Ocean Group, whereby users can end faxes via the fast London-Manhattan link with documents transferred to G3 machines at local country rates.

The advent of ISDN also opens up the market to colour fax.

Services

While the high-margin end of the market is still struggling, the suppliers of low-cost consumer fax machines will continue to win the lion's share of unit sales, according to Frost & Sullivan, with the market driven by automated fax-on-demand services.

Government departments were among the first to embrace the technology with Statfax which provides economic statistics, with Weatherfax among the more popular.

It is being used increasingly by customer support departments to save time and improve customer service response levels. An example is copier supplier Konica which has introduced Flashfax, a computer to fax information retrieval service which enables engineers to get immediate help in fault-finding when out on service calls.

The fact that fax services can be set up very quickly and run for a specified period is a big bonus. In March, for example, Hambros Bank used Mercury Communications' Surefax service to launch Budgetline, a financial information broadcasting service designed to provide all clients simultaneously with accurate, up to the minute information about changes introduced in the budget and their implications.

Julie Harnett

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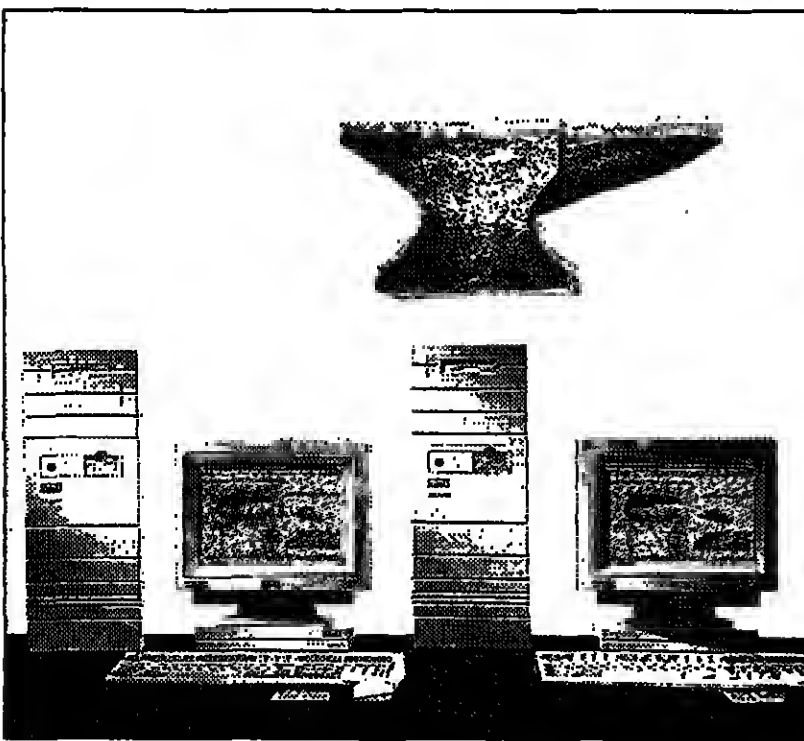
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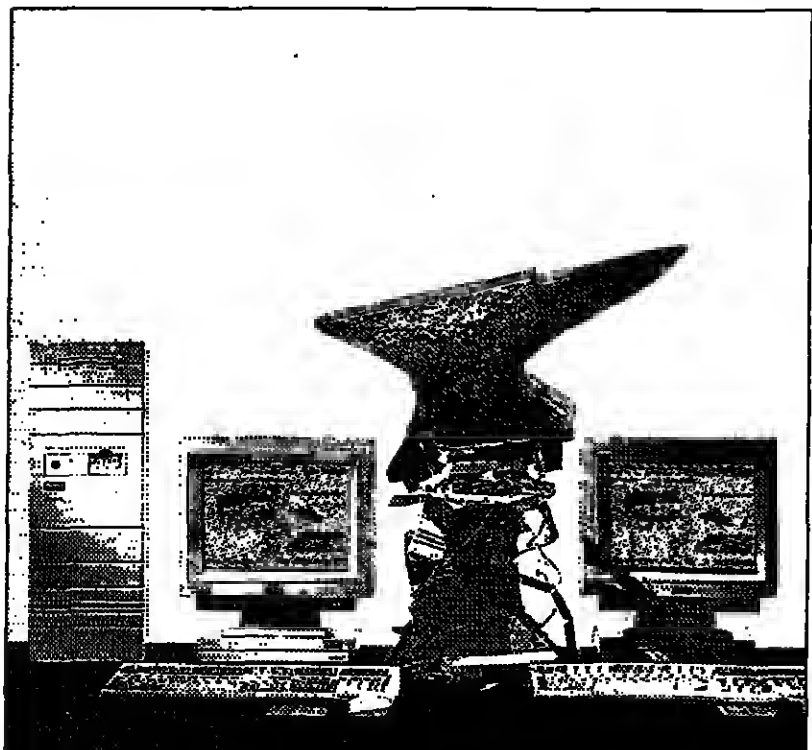
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COMPUTER SECURITY

High level of vulnerability

Many companies fail to take basic precautions, despite the high cost of computer fraud which may exceed \$4bn a year worldwide, reports Monica Horton

A COMPANY director was visiting his doctor's surgery recently. He noticed that the receptionist was away from her desk and the computer on the desk was turned on. He pressed 'enter', got a menu, chose patient records, and called one up on screen. He could have amended it or printed it out, and no one would have known.

The director in question happened to work for government computing specialist Lynwood Scientific Development, and his intentions were not malicious: he had in fact called up his own record. But what if he had been someone with a grudge against another patient?

Security on computers is becoming more, rather than less of an issue, now that many organisations are using PCs and PC-networks instead of holding their data in separate computer centres (see further

report on this page on IT business security issues).

Many companies, as in the above case of the doctor's surgery, do not recognise the PC as a potential source of security breaches.

In financial terms, computer-based fraud is thought to cost up to \$4bn a year worldwide. But as electronic purchase and payment transfers increase with the advance of electronic data interchange (EDI) between businesses, the financial targets for computer hackers may also increase.

"Companies don't seem to have adjusted well to the changing pattern of corporate computing. There is a feeling out there that it's only a personal computer," says Keith Heardon, lecturer in security management at Loughborough University.

Mr Heardon suggests that companies should work out what would happen if that PC were stolen, or lost in a fire. Replacing it, he says, would not be as simple as going to the high street and buying a similar model.

"You need the same operating system, configuration, software add-ons, and communications," he says.

In addition, the loss of data held on it, could cause more financial damage than the loss

of the actual hardware - unless the precaution had been taken to keep disk back-ups in another location.

David Cockarill, Lynwood's business development manager, advises that common-sense measures should be taken in the office as a first line of action.

A simple precaution that could have been taken in the doctor's surgery, for example, would have been to use a key which blanks the screen, and turns off the keyboard. The casual browser cannot read anything. Confidential memos should be stored on floppy disks and locked away - "You wouldn't leave a typescript on the desk, so don't do it with the electronic version," says Mr Cockarill.

Mr Heardon advises that staff should be told about computer security issues the best time to do this is on an induction course when they join an organisation. He recently conducted a survey of 421 UK organisations, which showed that two-thirds do not bother to take this precaution.

It is common for staff to write their password on yellow stickers, posted on their screen. Anyone - clients or suppliers - visiting the office could see it, and use it later to hack into the network to

access files. Training should include basics such as why staff should not reveal their password, and how viruses can be introduced to a computer, as well as proper procedures for taking disk back-ups.

The best protection against viruses is simply to ban people from using any disk other than one that has been checked by the systems department - computer games, brought in by staff to play on their personal computers at lunch time, are a common hazard. Another sensible precaution is to forbid the uploading software from bulletin boards.

ONE simple course of action against hacking is to be more strict on the choice of passwords. According to Geoff Soulsby, marketing manager at Bocal Datacom, 90 per cent of all passwords are contained in 100 known names or words - "It isn't difficult for a hacker to guess those 100 words," he says. They include the 10 most popular boys and girls names, a few swear words, and several four-to-six letter words. "Dog" and "cat" are the third and fourth most popular passwords.

David Clark, partner specialising in computer security at management consultants

Touche Ross, says that there are no statistics on the extent of the problem of hacking, because few organisations will admit to it. But he added, "Fifteen per cent of the organisations I deal with have a concern about hacking. They may either have experienced it or they are worried about it."

It therefore follows that where a computer system or network is carrying information of high value to the organisation or its clients, something more than a password is needed.

Encryption of the data is not necessarily the answer. Encryption makes it impossible to read the data while it is travelling along the lines, but does not prevent unauthorised access. Normally, encryption is part of a package of measures which utilise other cryptographic techniques to protect against and to authenticate the message.

Unauthorised access can be prevented by a "challenge and response" system. Staff are given an electronic gadget that looks similar to a calculator. When someone logs on to the system, it sends back a challenge which appears on the screen. The challenge is entered into the gadget, which uses complicated mathematical algorithms to calculate a



Early warning system: the City of London Police, in conjunction with the City Corporation and British Telecom have launched a Pager Alert System to give rapid warnings of suspect packages and vehicles or bomb alerts in the area. Pictured here is Owen Kelly, Commissioner of the City of London Police. Picture by Terry Kirk

response, which must be entered into the system. If the gadget has obtained the correct response, the user is permitted to access the system.

They are also used where people are regularly dialling in to a system from remote locations.

But the cost is not cheap. According to Mr Soulsby, the "calculator" gadget costs around £50, but a large organisation such as a bank might buy 10,000.

Authentication of messages is done using a digital signature - an indication to the recipient that they have not been tampered with.

and Natwest banks, as well as other commercial organisations, to protect sensitive payment and order data.

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Mathematical algorithms scramble the characters in a message, and produce a 64-digit message string, which is then appended to the original text. The recipient uses the same algorithms to decode the string. If the message has been tampered with a different string would be produced.

Mr Clark recommends that a digital signature is used "where it is vital that the recipient is assured of the source of the transaction."

Typically, this would be in a banking environment, where large sums of money are involved.

The annual IT Awards promote excellence in applying information technology in business, reports John Kavanagh

Clever ways of using 'ordinary' information technology

HUMAN ingenuity can put straightforward office automation products and services at the forefront of information technology (IT).

This is clear from the increasing numbers of office automation systems among the finalists in the Annual IT Awards competition run by the British Computer Society (BCS), the industry's professional body, to promote and highlight excellence in the application of IT.

The awards celebrate their twenty-first anniversary this year and have drawn a record number of entries. They are sponsored by such leading IT companies as BT, Bull, IBM, ICL, Logica, Mercury, Tandem and Unisys, plus the Department of Trade and Industry.

The 11 finalist medal winners, three of which will be selected for awards, include some eye-catching high technology projects, such as the Marlboro McLaren racing car which transmits data during a race to an analysis system in the pits.

But every-day office automation systems are also there, largely due to humans' ability to spot clever ways of using ordinary technology, rather than because the technology is particularly clever in itself.

Trafalgar House group's Engineering Division is among the finalist medal winners with its Global Office, an international network which handles voice, data and fax communications, electronic mail and video-conferencing. The system is claimed to be one of the biggest and sophis-

ticated of its kind in the world. But, the thinking behind the system is at least as significant as the technology, if not more so.

Mr Jim Noble, the IT director, says the network enables the company's disparate units to operate as what he calls "a single virtual company." This means it can cope more easily with peaks and troughs and reduce project schedules.

In addition, Trafalgar House has extended the network to clients, which can send their designs and ideas electronically for Trafalgar House engineers to work on: this has "transformed our competitive advantage," says Mr Noble.

ANOTHER finalist is using even simpler technology - a standard 3.5in. personal computer disc to potentially change the face of electronic publishing.

FRAX is a small software company in Aberdeen, formed 18 months ago, and now employing seven people and eight consultants on contract.

Its Smartbook package comprises 100 pages of text and 100 colour images of photographic quality into a standard disc which also includes software for cross-referencing any topic with any other.

The package costs £495. If necessary, FRAX can produce copies from customers' master discs at £1.25 each, including a

disc: in other words a fall electronic book on disc for little more than the price of the disc alone.

"CD-Rom has been the only way of distributing such documents, but not many users have CD-Rom drives," says managing director Mr Bob Garrioch. "In addition, once you go to press with CD-Rom it's like printing a book: you can't easily change it."

Smartbook uses ordinary discs, which can be used with any PC. The text can be prepared and amended using any word processing package.

FRAX sees many office applications for Smartbook. They range from training to distributing fully-illustrated product catalogues which can easily be updated. Sony recently put out the press pack on the new album by singer Paul Young on disc, complete with photographs, interviews and other illustrated information.

Another business application is the production of annual reports, with the facility for moving data from the report into a spreadsheet package for analysis, or into a library of company information, or any other file.

The hypertext facilities mean an electronic book could hold a photograph of, say, an office complex, with different areas numbered: entering a number could call up informa-

tion on that area.

Such entries to the BCS Awards competition are certainly welcomed by the society - "the ingenuity in the way IT is used is just amazing," says Mr Arrick Wilkinson, chairman of the preliminary judging panel for the last eight years.

"In addition, the range and quality - and the way the systems are developed these days, using formal methods and project management disciplines - are all constantly improving."

But why do companies enter for the BCS Awards? The competition is demanding: two judges spend at least half a

day with each entrant. The only prize is a trophy or a medal. However, recent finalists say awards are especially important for office automation projects because they help beat the common problem of getting end-users to actually use the system.

It is relatively easy to implement systems - "the hard part is winning over the users," says Jim Noble at Trafalgar House. "Telling them they've got a good system, doesn't work what really makes the difference is when they see an award and read reports of our success."

Bridie Collier, IT co-ordinator at the Patent Office, sees the BCS Awards as important for systems staff, too.

The Patent Office won an award in 1990 with services group Computer Sciences for a £12.7m project which put 380 marks online to staff.

"People rarely give you good news: it's usually bad news or requests for enhancements," she says. "So although we felt we had a good system, we were never self-congratulatory about it, because the users were always saying, 'Why doesn't it do such-and-such?'"

"This meant we didn't think

we had a chance. Winning was a great surprise - and made us feel we were right to be pleased with the system."

This reaction is common to many winners.

"This was a recognition of what the whole department was capable of - not just the people who happened to be in that particular project team at that time," says Mr Mark Nonour, a systems manager at British Airways.

The company won a BCS Award in 1991 with a system which works out the most profitable ways of filling flights with passengers. Winning a BCS Award

might be icing on the cake to some, but to those trying to "sell" their systems to their end-users, it can clearly be a key to success.

The winning trio

This year's three BCS Award winners will be announced at London's Waldorf Hotel on November 15 by Mr William Waldegrave, Chancellor of the Duchy of Lancaster. All the finalist projects will be on display throughout the afternoon.

Free tickets are available from Anna Duckworth at the BCS on (0793) 490 269.

Business protection and IT risk management

Serious conflict of priorities

BUSINESS protection now offers some of the highest growth rates in the information technology sector. In the next five years to 1997, companies in the UK will spend £2.5bn on protection, representing a compound annual growth rate of almost 30 per cent.

Research by the International Data Corporation shows that 40 per cent of this IT business protection will be "outsourced." The report examines four areas: database recovery, access control, contingency planning and disaster recovery in sectors ranging from banking and insurance to retailing and manufacturing.

One phenomenon that emerges from the IDC survey is that while, alarmingly, only 12 per cent of organisations were "totally confident" in their ability to recover from a serious IT incident leading to business disruption, more than 20 per cent considered IT security to be a "prime concern" and a significant item for IT expenditure.

This apparent conflict in priorities provides a measure of the level of opportunity available to computer services vendors. Even though companies are becoming increasingly dependent on information technology, more than 35 per cent do not consider IT security to be a "major priority," according to the survey.

Finance directors, who are generally beginning to view IT strategy and expenditure more critically, still tend to consider IT business protection as "more of a technical issue than a commercial necessity."

With UK commercial losses due to computer security lapses now running at well over £1bn a year, "awareness of the problem is the first stage for treatment - and recognition has to come from the top of an organisation," says the new *Director's Guide to Business Security*, produced by the Institute of Directors and Digital Equipment.

Having been through its own worldwide review of internal security, Digital advises companies on security strategies and then helping the customers to implement them. Consultancy begins with a "threat assessment" to identify risk areas and their impact on the business. The risks evaluated include theft, industrial espionage and even bomb attacks.

Digital's approach to net-

work security has been learned in the harsh light of experience. In 1990, a fire destroyed one of its UK office complexes - although only 18 months old, the structure which also housed a large digital computing facility, was 80 per cent destroyed in less than an hour.

The IDC/Digital survey suggests a range of sources of advice on IT security. These include:

□ The Confederation of British Industry which has two relevant groups: the Computer Security Working Group and the Computer Misuse Working Group. Details from Wendy Rainbow at the CBI on 071 379 7400.

□ The British Computer Society which has a committee on data security. Details from the BCS on 0793 490 269.

□ The Computer Crime Unit of the Metropolitan and City Police - described as the only police unit in the UK which specialises in the investigation of computer-related crime. Details on 071 230 1189.

□ The European Security Forum: an independent, non-profit group dedicated to resolving issues of IT security. Details on 071 833 1745.

□ International Information Integrity Institute (I4): formed in 1986 by SRI International; member-companies include both suppliers and advanced users of information technology. Details from Ken Lindup on 061 685 6555.

In the aftermath of the bomb disaster at Bishopsgate in the City, Safetynet, a leading supplier of business continuity services, has made an extensive report listing 20 areas of "lessons learned" regarding contingency planning. Among the findings in the report are:

□ A bad plan is worse than no plan at all.

□ Business continuity budgets are often inadequate - and "business as usual" is a myth.

□ Third party involvement is critical to success in contingency planning.

□ Weekend "disasters" are easier to survive.

□ Supplier goodwill is not enough.

□ Off-site storage must be comprehensive.

□ Insurance alone does not usually cover losses.

□ Multi-site organisations recover more quickly.

As an example of the new awareness of IT security in the City of London, AST Trans-Act - a subsidiary of the

Royal Bank of Canada - has won five contracts worth £3.5m - just three months after launching its business recovery facility. This is one of the first "shared subscription" facilities for City businesses wanting contingency plans for serious trading disruptions.

Following a disaster, clients have the use of an office complex and dealing room for 180 staff. The facility is guarded around the clock and has an uninterruptible power supply.

*Report: 'UK IT Business Protection: A Window of Opportunity for Computer Services Vendors'; from IDC, London, telephone 081 995 8022.

*Director's Guide to Business Security; Institute of Directors, London; £3.95; details on 071 497 3001.

*After Bishopsgate: the Lessons Learned; report available from Caroline Dwyer, Safetynet, telephone 0344 859 933

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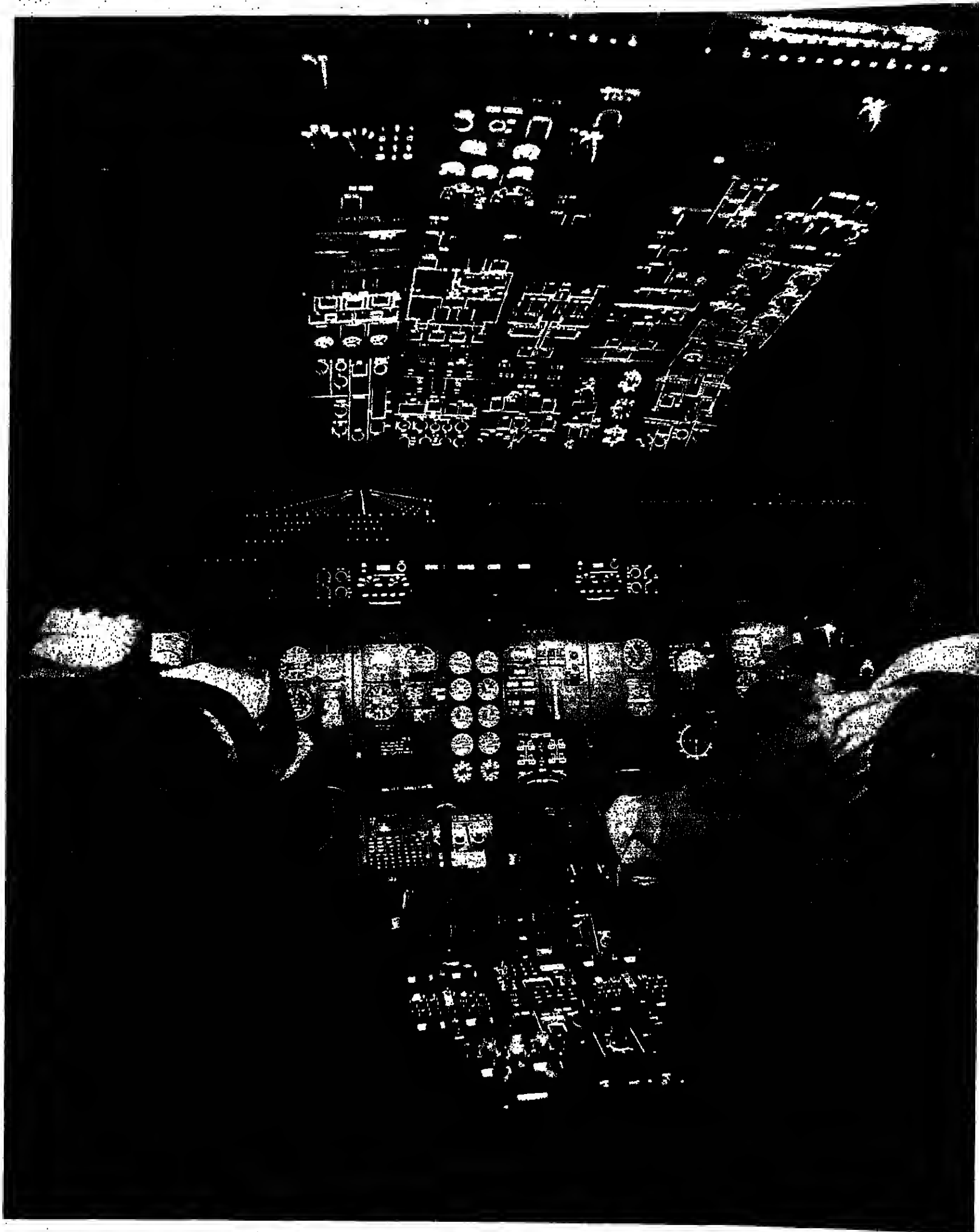
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